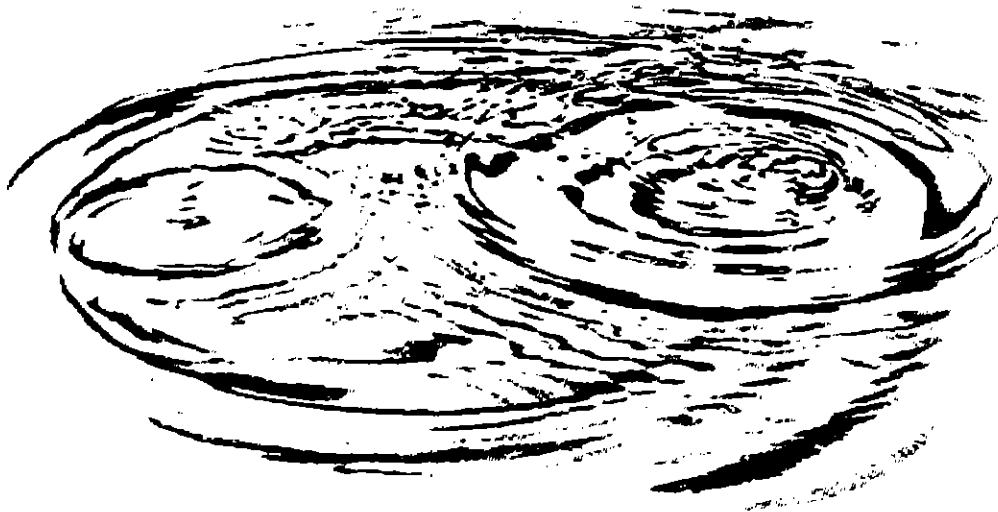


UPPER SAN GABRIEL VALLEY
MUNICIPAL WATER DISTRICT

Urban Water Management Plan



December 2005



Prepared by:
Stetson Engineers Inc.

861 Village Oaks Drive, Covina, California 91724
Phone: (626) 967-6202, Fax: (626) 331-7065
Covina, CA San Rafael, CA Mesa, AZ

TABLE OF CONTENTS

CHAPTER 1 INTRODUCTION	1-1
1.1 Urban Water Management Plan	1-1
1.2 Agency Coordination	1-2
1.3 Water Management Tools	1-3
1.4 Changes to the Plan	1-3
 CHAPTER 2 DESCRIPTION OF SERVICE AREA.....	 2-1
2.1 Background	2-1
2.2 Upper District's Local Water Suppliers	2-3
2.3 Description of Area	2-4
2.4 Current and Projected Population	2-4
2.5 Climate	2-5
 CHAPTER 3 SOURCES OF SUPPLY	 3-1
3.1 Existing and Planned Sources of Water Supply	3-1
3.1.1 Metropolitan's Supply	3-1
3.1.2 Recycled Water	3-3
3.2 Groundwater Basin.....	3-3
3.2.1 Groundwater Management Plan.....	3-4
3.2.1.1 Long Beach Judgment.....	3-5
3.2.1.2 Main Basin Judgment	3-7
3.2.1.3 Operations of the Groundwater Basin.....	3-9
3.2.1.4 Five-Year Water Quality and Supply Plan	3-11
3.2.1.5 Upper District Policy No. 9-00-8.....	3-12
3.2.1.5.1 Policy Objectives	3-13
3.2.1.5.2 Policy Guidelines.....	3-13
3.2.1.6 Water Quality Authority 406 Plan.....	3-14
3.2.2 Description of Groundwater Basin.....	3-15
3.2.3 Geology	3-16
3.2.4 Hydrology	3-18
3.2.5 Groundwater Recharge	3-19
3.2.6 Location, Amount and Sufficiency of Groundwater.....	3-21
3.3 Reliability of Supply	3-22
3.4 Transfers and Exchanges of Water	3-22
 CHAPTER 4 PAST, CURRENT AND PROJECTED WATER USE.....	 4-1
4.1 Past and Current Water Use	4-1
4.2 Projected Water Use	4-4
 CHAPTER 5 CURRENT CONSERVATION MEASURES	 5-1
5.1 Current Implemented Demand Management Measures.....	5-2
5.1.1 Residential Plumbing Retrofit	5-2
5.1.2 System Water Audits, Leak Detection and Repair.....	5-2
5.1.3 Metering With Commodity Rates.....	5-3

TABLE OF CONTENTS **(CONTINUED)**

5.1.4	Large Landscape Conservation Programs and Incentives	5-3
5.1.5	High-Efficiency Washing Machine Rebate Programs	5-4
5.1.6	Public Information Programs	5-4
5.1.7	School Education Programs	5-5
5.1.8	Conservation Programs for Commercial, Industrial and Institutional ..	5-5
5.1.9	Wholesale Agency Programs	5-6
5.1.10	Conservation Pricing	5-7
5.1.10.1	Tiered Rate Structure	5-7
5.1.10.2	Long-term Cyclic Storage	5-8
5.1.10.3	Replenishment Service	5-8
5.1.10.4	Recycled Water	5-9
5.1.11	Water Conservation Coordinator	5-9
5.1.12	Water Waste Prohibition	5-9
5.1.13	Residential Ultra-Low Flush Toilet Replacement Programs	5-9
5.2	Demand Management Measures Not Implemented	5-10
5.2.1	Water Survey Programs for Single-Family and Multi-Family Residential Customers	5-10
CHAPTER 6 WATER SUPPLY OPPORTUNITIES		6-1
6.1	Water Use Projections	6-1
6.2	Future Water Supply Projects	6-1
6.2.1	Surface Water Treatment Plant Improvements	6-2
6.2.2	PERC III Study	6-2
6.2.3	Groundwater Cleanup	6-3
6.2.4	Recycled Water	6-4
6.2.4.1	Groundwater Recharge Program	6-4
6.2.4.2	San Gabriel Valley Water Recycling Direct Reuse Projects	6-4
6.2.4.2.1	San Gabriel Valley Water Recycling Reuse Project Phase I	6-4
6.2.4.2.2	San Gabriel Valley Water Recycling Reuse Project Phase IIA	6-5
6.2.4.2.3	San Gabriel Valley Water Recycling Reuse Project Phase IIB	6-6
6.2.4.2.4	San Gabriel Valley Water Recycling Reuse Project Phase III	6-6
6.3	Desalinated Water	6-7
CHAPTER 7 URBAN WATER SHORTAGE CONTINGENCY ANALYSIS		7-1
7.1	Water Shortage Management	7-1
7.2	Water Shortage Actions	7-2
7.2.1.	Water Surplus and Drought Management Plan	7-2
7.3	Programs to Mitigate Water Shortages	7-4

TABLE OF CONTENTS **(CONTINUED)**

7.3.1 Recycled Water Study.....	7-4
7.3.2 Cyclic Storage.....	7-4
7.3.3 Long-Term Cyclic Storage	7-5
7.4 Water Supply Availability	7-5
7.5 Catastrophic Supply Interruption	7-5
7.6 Mandatory Prohibitions, Penalties and Charges.....	7-6
7.7 Consumption Reduction Programs.....	7-7
7.8 Revenue Impacts	7-7
7.9 Determination of Reductions in Water Use.....	7-9
CHAPTER 8 RECYCLED WATER	8-1
8.1 Background	8-1
8.2 Wastewater Collection and Treatment Systems.....	8-1
8.3 Recycled Water Use.....	8-2
8.4 Potential Uses of Recycled Water	8-4
8.5 Projected Use of Recycled Water.....	8-5
8.6 Future Plans for Recycled Water.....	8-5
8.6.1 San Gabriel Valley Water Recycling Direct Reuse Projects	8-6
8.6.1.1 Phase I	8-6
8.6.1.2 Phase IIA.....	8-6
8.6.1.3 Phase IIB.....	8-7
8.6.1.4 Phase III	8-7
8.6.2 Groundwater Recharge Program	8-8
8.6.3 Recycled Water Sales	8-8
CHAPTER 9 WATER QUALITY	9-1
9.1 Water Quality Summary	9-1
CHAPTER 10 WATER SUPPLY RELIABILITY.....	10-1
10.1 Reliability of Upper District's Water Supply	10-1

TABLES

Table 1	Historic Sources of Water Available to Metropolitan
Table 2	Historic Annual Rainfall in the San Gabriel Valley
Table 3	Historic Upper District Water Sales by Category by Use
Table 4	Service Connection Information Within Upper District's Service Area
Table 5	Historic Upper District Water Deliveries by Service Connection
Table 6	Historic Water Production, Imported Water Supply, and Recycled Water Use Within Upper San Gabriel Valley Municipal Water District
Table 7	Historic Metropolitan/Upper District Cyclic Storage Account
Table 8	Projected Water Production, Imported Water Supply, and Recycled Water Use Within San Gabriel Municipal Water District

TABLE OF CONTENTS

(CONTINUED)

Table 9	Historic Recycled Water Use Within Upper San Gabriel Valley Municipal Water District
Table 10	Summary of Potential Reclaimed Water Users
Table 11	Projected Recycled Water Use
Table 12	Potential Users of Recycled Water from San Gabriel Valley Water Recycling Direct Reuse Project

FIGURES

Figure 1	Annual Rainfall in the San Gabriel Valley
Figure 2	Historic Baldwin Park Key Well Elevation
Figure 3	Past and Current Water Use
Figure 4	Current and Projected Water Use
Figure 5	Historic Water Use (gallons/capita/day)

PLATES

Plate 1	Upper District Division Map and Service Connections
Plate 2	Water District Boundaries
Plate 3	San Gabriel Valley/Main San Gabriel Basin
Plate 4	Groundwater Contour Map for San Gabriel Basin
Plate 5	Water Reclamation Plant Locations

APPENDICES

Appendix A	Urban Water Management Planning Act
Appendix B	Notification to Agencies within Service Area
Appendix C	Long Beach Judgment
Appendix D	Main San Gabriel Basin Adjudication
Appendix E	Rules and Regulations of the Main San Gabriel Basin Watermaster
Appendix F	Five-Year Water Quality and Supply Plan
Appendix G	Policy No. 9-00-8
Appendix H	WQA 406 Plan
Appendix I	Metropolitan's Supply Capability Tables
Appendix J	California Urban Water Conservation Council Annual Reports and Coverage Reports
Appendix K	Upper San Gabriel Valley Municipal Water District's Rate Schedule Resolution

TABLE OF CONTENTS
(CONTINUED)

Appendix L	Upper San Gabriel Valley Municipal Water District's DMM Information
Appendix M	Draft Urban Water Shortage Contingency Resolution
Appendix N	Resolution No. 6-90-266
Appendix O	Resolution No. 4-00-371 and No. 4-95-333
Appendix P	Memorandum of Understanding for Master Plan Revisions

Chapter 1

INTRODUCTION

1.1 URBAN WATER MANAGEMENT PLAN

Section 10617. "Urban Water Supplier" means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers.

This report was prepared in accordance with the California Urban Water Management Planning Act (Act)* which became effective on January 1, 1985 (Appendix A). The Act requires every "urban water supplier" to prepare and adopt an Urban Water Management Plan (hereinafter Plan or Management Plan), and to periodically review its Plan at least once every five years and make any amendments or changes which are indicated by the review. The primary objective of the Act is to direct urban water suppliers to evaluate their existing water conservation efforts and, to the extent practicable, to review and implement alternative and supplemental water conservation measures. **The Act is directed primarily at retail water purveyors where programs can be immediately affected upon the consumer.** Urban water suppliers that indirectly provide water to customers have the option of either adopting an individual Plan or participating in area-wide, regional, watershed or basin-wide Plans.

Upper San Gabriel Valley Municipal Water District's (Upper District) Plan is an update for the year 2005 and reviews the activities of Upper District as a wholesale water supplier in the Main San Gabriel Basin (Main Basin). The Plan describes the operations of the Main Basin management, which achieve the maximum practicable conservation and efficient use of the water resources of the area, both local and imported.

* Water Code Sections 10610 through 10656

1.2 AGENCY COORDINATION

Section 10620

(a) Every urban water supplier shall prepare and adopt an urban water management plan in the manner set forth in Article 3 (commencing with Section 10640).

(b) Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.

(c) An urban water supplier indirectly providing water shall not include planning elements in its water management plan as provided in Article 2 (commencing with Section 10630) that would be applicable to urban water suppliers or public agencies directly providing water, or to their customers, without the consent of those suppliers or public agencies.

(d) (1) An urban water supplier may satisfy the requirements of this part by participation in area wide, regional, watershed, or basin wide urban water management planning where those plans will reduce preparation costs and contribute to the achievement of conservation and efficient water use.

(2) Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.

(e) The urban water supplier may prepare the plan with its own staff, by contract, or in cooperation with other governmental agencies.

Upper District notified its sub-agencies (including Cities within its service area) of the preparation of the 2005 Urban Water Management Plan. Upper District's sub-agencies and the Cities within its service area were invited to participate in the development of the 2005 Plan by providing comments and attending a workshop for the Management Plan. Upper District sent a letter to its sub-agencies and Cities within its service area notifying them of Upper District's preparation of the 2005 Plan. A copy of the notification letter sent is located in Appendix B. In addition, Upper District held an Urban Water Management Planning workshop on July 19, 2005 to review the Plan process and to provide opportunities for coordination. Also, on November 15, 2005, Upper District held a workshop to discuss the contents of its 2005 draft Plan and to obtain comments from its sub-agencies and the Cities within its service area to incorporate in its Plan.

In addition, Upper District made the 2005 Draft Plan available for public review and held a public hearing on December 6, 2005. Upon completion of the public hearing, Upper District adopted the Draft Plan, including the modifications resulting from the public hearing, as its Urban Water Management Plan. Within 30 days of the adoption of

the Plan, Upper District filed a copy of the Plan with the State of California, Department of Water Resources; the California State Library; and with the cities located within Upper District's service area.

1.3 WATER MANAGEMENT TOOLS

Section 10620

(f) An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.

This Plan describes the management tools and options used to maximize local resources and minimize the need to import water. In particular, Chapter 3 discusses the management of the groundwater basin, Chapter 5 discusses the Demand Management Measures (DMMs) implemented by Upper District, Chapter 6 describes future water supply projects within Upper District's service area and Chapter 8 discusses recycled water use and the potential plans to serve additional sub-agencies within Upper District's service area. As a wholesale water agency, Upper District delivers imported water to its sub-agencies for direct use and groundwater replenishment and is committed to assisting its sub-agencies to maximize their local resources. For example, Upper District encourages its sub-agencies to implement DMMs as an option to conserve water and maximize local water resources.

1.4 CHANGES TO THE PLAN

Section 10621

(a) Each urban water supplier shall update its plan at least once every five years on or before December 31, in years ending in five and zero.

(b) Every urban water supplier required to prepare a plan pursuant to this part shall notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.

(c) The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640).

Upper District prepared its first Management Plan in 1985 and since has updated its plan every five years. This Plan is for 2005 and is an update from the 2000 Plan.

There have been many new amendments added to the Act and some reorganization of the water code sections since Upper District's last update in 2000. The additions and changes are as follows:

- 1) Senate Bill 610, Land and Water Use Planning Bill
- 2) Assembly Bill 901, Water Quality Information
- 3) Senate Bill 672, Minimize Need to Import Water
- 4) Senate Bill 1348, Consider Demand Management Measures Implementation When Evaluating Eligibility
- 5) Senate Bill 1384, Wholesale Agency Water Supply Information
- 6) Senate Bill 1518, Recycled Water
- 7) Assembly Bill 105, Deposit Urban Water Management Plans in State Library
- 8) Senate Bill 318, Desalination

In accordance with Water Code Section 10621, Upper District has reviewed its Management Plan, and appropriate changes were included.

Chapter 2

DESCRIPTION OF SERVICE AREA

Section 10631

a) Describe the service area of the supplier; including current and projected population, climate, and other demographic factors affecting the supplier's water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available.

2.1 BACKGROUND

Upper District is a wholesale water agency that was incorporated on January 7, 1960 under the Municipal Water District Act. The Municipal Water District Act provides for , "The people of any county or counties, or of any portions thereof, whether such portions include unincorporated territory only or incorporated territory of any city or cities, or both such incorporated and unincorporated territories..." to organize municipal water districts. With respect to water supply, the Municipal Water District Act allows such a district to "...acquire, control, distribute, store, spread, sink, treat, purify, reclaim, recapture, and salvage any water, including sewage and storm waters, for the beneficial use or users of the District, its inhabitants, or the owners of rights to water in the District." Upper District is governed by a five member Board of Directors and is broken down into five divisions, which are shown on Plate 1 included in the back of this Plan. Upper District employs a general manager and office staff and retains an attorney and consulting engineer. As a wholesaler, Upper District supplies supplemental imported water from the Metropolitan Water District of Southern California (Metropolitan) and recycled water to its sub-agencies.

Metropolitan is comprised of 26 member agencies that receive imported water from the State Water Project and the Colorado River. Upper District is a member agency of Metropolitan.

While Upper District is a water wholesaler with no retail customers of its own, Upper District's sub-agencies provide water to retail customers. Upper District's sub-agencies include a number of urban water suppliers that are required to prepare Management Plans. As a wholesaler, Upper District provides imported water service to sub-agencies through Metropolitan's distribution system and recycled water service through a local distribution system. The majority of the imported water delivered from Upper District to its sub-agencies is used for groundwater recharge and delivered through service connection USG-3.

Upper District also purchases treated water from Metropolitan that it supplies to its sub-agencies through the following service connections:

- USG-1: Southern California Water Company
- USG-2: City of South Pasadena
- USG-4: Suburban Water Systems
- USG-5: City of Alhambra
- USG-6: City of Arcadia
- USG-7: City of Monrovia
- USG-8: City of Azusa
- USG-9: Valley County Water District

Metropolitan has prepared a draft document entitled "The Metropolitan Water District of Southern California Regional Urban Water Management Plan" (RUWMP), dated May 2005. Metropolitan's 2005 RUWMP draft is available for use and reference by its member agencies and urban water suppliers within those member agencies.

Upper District's Plan incorporates by reference the 2005 RUWMP draft prepared by Metropolitan and supplements the Plans prepared by the urban water suppliers within Upper District.

2.2 UPPER DISTRICT'S LOCAL WATER SUPPLIERS

Based upon their 2003-04 water production and imported water deliveries, the following urban water suppliers within or partially within Upper District's boundaries may be required to prepare a Plan.

- Arcadia, City of
- Azusa Valley Water Company
- California-American Water Company
 - Duarte Division
 - San Marino Division
- California Domestic Water Company
- Covina, City Of
- Covina Irrigating Company
- East Pasadena Water Company
- El Monte, City of
- Glendora, City of
- Industry, City of
- Monrovia, City of
- San Gabriel County Water District
- San Gabriel Valley Water Company
- Southern California Water Company
 - San Gabriel Valley Division
 - San Dimas Division
- South Pasadena, City of
- Suburban Water Systems
- Sunny Slope Water Company
- Valley County Water District
- Whittier, City of

2.3 DESCRIPTION OF AREA

Upper District is located within San Gabriel Valley in Los Angeles County and is within the Main Basin. The boundaries of Upper District are shown on Plate 2. Upper District's service area is about 144 square miles and includes all of portions of the Cities of Arcadia, Azusa, Baldwin Park, Bradbury, Covina, Duarte, El Monte, Glendora, Industry, Irwindale, La Puente, Monrovia, Rosemead, San Gabriel, South El Monte, South Pasadena, Temple City, and West Covina. The service area of Upper District is largely urbanized consisting of mainly residential, light industrial and commercial uses.

2.4 CURRENT AND PROJECTED POPULATION

Upper District occupies an area of about 144 square miles and has a current estimated population of about 898,000. The following tabulation presents the estimated historic and projected population of the area encompassed by the Upper San Gabriel Valley Municipal Water District from 1950 to 2025. The sources of the following data are the Census Bureau, Southern California Association of Governments (SCAG) and Metropolitan Water District.

<u>Year</u>	<u>Population</u>	<u>Percent Increase</u>	<u>Source</u>
1950	261,000	--	Census
1960	440,000	69	Census
1970	651,000	48	Census
1980	670,000	3	Census
1990	787,000	17	Census
1995	806,000	2	Metropolitan
2000	866,000	7	Metropolitan
2005	898,000	3.5	SCAG
2010	952,000 (projected)	6	SCAG
2015	988,000 (projected)	4	SCAG

<u>Year</u>	<u>Population</u>	<u>Percent Increase</u>	<u>Source</u>
2020	1,017,000 (projected)	3	SCAG
2025	1,069,000 (projected)	5	SCAG

2.5 CLIMATE

The service area and location of Upper District in the San Gabriel Valley has a dry climate and summers can reach temperatures in the low 100s. The average rainfall in the San Gabriel Valley in 2003-04 was 12.7 inches, which was 75 percent of the normal conditions for the area. Figure 1 shows the annual rainfall in the San Gabriel Valley and the long-term average precipitation, about 17.7 inches. In the last ten years the average of 17.7 inches was reached three times in 1994-95, 1997-98 and 2002-03, as shown on Figure 1.

Chapter 3

SOURCES OF SUPPLY

3.1 EXISTING AND PLANNED SOURCES OF WATER SUPPLY

Section 10631

b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a).

Upper District depends upon Metropolitan for its current and future imported water supplies. Metropolitan supplies imported water to Upper District, which in turn supplies that imported water to its sub-agencies. Treated imported water is delivered by Upper District to its sub-agencies for direct use from Upper District service connections on the Metropolitan distribution system. The reliability of future supplies of imported water is directly dependent upon the sources of supply available to Metropolitan. Metropolitan discusses the reliability of its existing and planned sources of water supply in its draft 2005 RUWMP, which is incorporated by reference. Metropolitan states in its 2005 RUWMP that it will be able to provide the water supply demand over the next 20 years.

In addition, Upper District works with local water agencies to use recycled water which is obtained from the Sanitation Districts of Los Angeles County (CSD).

3.1.1 METROPOLITAN'S SUPPLY

Metropolitan owns and operates the Colorado River Aqueduct which conveys water from Lake Havasu on the Colorado River to water transmission pipelines and to Lake Matthews for storage. Metropolitan's Colorado River water right includes a fourth and fifth priority under the 1931 Seven Party Agreement relating to California's share in the Colorado River water supply. An amount of 550,000 acre-feet was allotted under the fourth priority right and an amount of 662,000 acre-feet was allotted under the fifth priority right. Metropolitan can receive water under the fourth priority right when the United States

Secretary of the Interior determines that there is a surplus of water or if Arizona or Nevada does not use all of their allocated water.

In 1964 a United States Supreme Court decree (Arizona v. California) limited California to 4.4 million acre-feet per year from the Colorado River plus any available surplus water. In 1987 an agreement was made and Metropolitan entered into a contract with the Bureau of Reclamation for an additional 180,000 acre-feet per year of surplus water. In addition, Metropolitan can also obtain 85,000 acre-feet per year of water through a conservation program with the Imperial Irrigation District.

Metropolitan contracts with the State of California, through the State Water Project, for the delivery of northern California water through the California Aqueduct. The State Water Project is a statewide water conveyance system that captures, stores and conveys water to 29 water agencies. The State Water Project long-term annual deliveries average about 2.5 million acre-feet per year. The original State Water Project's total contractual commitment called for a capacity of 4.2 million acre-feet per year. Metropolitan has a maximum annual entitlement of 2,011,500 acre-feet. .

The State Water Project may not be able to fulfill all of its contractual water delivery requirements in the future due to the rapid increase in California's population. In order for the State Water Project to deliver all of the water contracted, additional water supplies must be developed. Water diverted at the Sacramento-San Joaquin Delta by the State Water Project must be water that is surplus to the needs of the areas of origin. As local use of water in northern California increases, the supply to the State Water Project may be reduced. Also, water quality requirements in the Sacramento-San Joaquin Delta affect the quantity of water available to the State Water Project.

Table 1 summarizes the historic sources of water supply available to Metropolitan from 1995 through 2004.

3.1.2 RECYCLED WATER

As noted later in Chapter 8, CSD operates both the Whittier Narrows Water Reclamation Plant (WNWRP) and the San Jose Creek Water Reclamation Plant (SJCWRP). The WNWRP, which began operation in 1962, was the first reclamation plant built by the CSD. It has a treatment capacity of about 15 million gallons per day (MGD) and provides coagulated, filtered and disinfected tertiary effluent. The WNWRP serves a population of approximately 150,000 people. During the fiscal year 2003-04, the total water production from this plant was about 8,380 AF. The SJCWRP, which began operation in 1973, currently has a treatment capacity of about 100 MGD and provides coagulated, filtered and disinfected tertiary effluent. The SJCWRP has room for an expansion of an additional 25 MGD, which has an anticipated completion date in 2006. The SJCWRP plant serves a population of approximately 1 million people, largely a residential population. During fiscal year 2003-04, the total water production from this plant was about 92,000 AF.

These two facilities provide a source of recycled water for Upper District's existing and proposed recycled water projects.

3.2 GROUNDWATER BASIN

Section 10631

If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information shall be included in the plan:

- 1) A copy of any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing with Section 10750), or any other specific authorization for groundwater management.*
- 2) A description of any groundwater basin or basins from which the urban water supplier pumps groundwater. For those basins for which a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court of the board and a description of the amount of groundwater the urban water supplier has the legal right to pump under the order or decree. For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to eliminate the long-term overdraft condition.*
- 3) A detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis*

shall be based on information that is reasonably available, including, but not limited to, historic use records.

4) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

Upper District's legal boundaries are within the San Gabriel Valley, as noted in Chapter 2, and overlie the Main Basin. Upper District has never produced groundwater from the Main Basin and currently does not have facilities to do so. However, Upper District's sub-agencies produce water from the Main Basin. The following provides a description of the sources of supply available to retail groundwater producers within Upper District and the multi-layer management structure that is in place to ensure long-term adequacy of the water supply. The Main Basin has been adjudicated and management of the water resources within the Main Basin is based on its adjudication. The Department of Water Resources' (DWR) Bulletin 118 does not identify the Main Basin as being in overdraft.

3.2.1 GROUNDWATER MANAGEMENT PLAN

Upper District has not adopted a specific groundwater management plan. Management of the water resources in the San Gabriel Valley is based upon Watermaster services under two Court Judgments: San Gabriel River Watermaster (River Watermaster)¹ and Main San Gabriel Basin Watermaster (Basin Watermaster)². Upper District is an intervener in the Long Beach Judgment and as such has significant participation.

In addition, Upper District was the plaintiff in the court action that resulted in the creation of the Main Basin Watermaster. Two members of the Upper District Board are appointed to serve on the Watermaster. Upper District is also included in Main Basin

¹ Board of Water Commissioners of the City of Long Beach, et al., v. San Gabriel Valley Water Company, et al., Los Angeles County Case No. 722647, Judgment entered September 24, 1965.

² Upper San Gabriel Valley Municipal Water District v. City of Alhambra, et al., Los Angeles County Case No. 924128, Judgment entered January 4, 1973.

management described in the Basin Watermaster document entitled "Five-Year Water Quality and Supply Plan." The following sections provide a description of the two Judgments and the Five Year Water Quality and Supply Plan that make up the groundwater management plan for the Main Basin. In addition, this section describes Upper District's and Water Quality Authority's (WQA) policies to promote groundwater basin clean-up.

3.2.1.1 LONG BEACH JUDGMENT

On May 12, 1959, the Board of Water Commissioners of the City of Long Beach, the Central Municipal Water District (Central District), and the City of Compton, as plaintiffs, filed an action against the San Gabriel Valley Water Company and 24 other producers of groundwater from the San Gabriel Valley as defendants. This action sought a determination of the rights of the defendants in and to the waters of the San Gabriel River system and to restrain the defendants from an alleged interference with the rights of plaintiffs and persons represented by the Central District in such waters. After six years of study and negotiation a Stipulation for Judgment was filed on February 10, 1965, and the Judgment (Long Beach Judgment) was entered on September 24, 1965. Under the terms of the Long Beach Judgment, the water supply of the San Gabriel River system was divided at Whittier Narrows, between San Gabriel Valley upstream and the coastal plain of Los Angeles County downstream. A copy of the Long Beach Judgment can be found in Appendix C.

Under the terms of the Long Beach Judgment, the area downstream from Whittier Narrows (Lower Area), the plaintiffs and those they represent, are to receive a quantity of usable water annually from the San Gabriel River system comprised of usable surface flow, subsurface flow at Whittier Narrows and water exported to the Lower Area. This annual entitlement is guaranteed by the area upstream of Whittier Narrows (Upper Area), the defendants, and provision is made for the supply of Make-up Water by the Upper Area for years in which the guaranteed entitlement is not received by the Lower Area.

Make-up Water is imported water purchased by the Basin Watermaster and delivered to agencies in Central District to satisfy obligations under the Long Beach Judgment. The entitlement of the Lower Area varies annually, dependent upon the 10-year average annual rainfall in San Gabriel Valley for the 10 years ending with the year for which entitlement is calculated.

The detailed operations described in the Long Beach Judgment are complex and require continuous compilation of data so that annual determinations can be made to assure compliance with the Long Beach Judgment. In order to do this, a three-member Watermaster was appointed by the Court, one representing the Upper Area parties nominated by and through Upper District, one representing the Lower Area parties nominated by and through the Central District, and one jointly nominated by Upper District and Central District. This 3-member board is known as the San Gabriel River Watermaster (River Watermaster).

The River Watermaster meets periodically during the year to adopt a budget, to review activities affecting water supply in the San Gabriel River system area, to compile and review data, to make determinations of usable water received by the Lower Area, and to prepare its annual report to the Court. The River Watermaster has rendered annual reports for the water years 1963-64 through 2003-04 and operations of the river system under that Court Judgment and through the administration by the River Watermaster have been satisfactory since its inception.

One major result of the Long Beach Judgment was to leave the Main Basin free to manage its water resources so long as it meets its downstream obligation to the Lower Area under the terms of the Long Beach Judgment. Upper District intervened in the Long Beach case as a defendant to enforce the provisions of a Reimbursement Contract, which was incorporated into the Long Beach Judgment to assure that any Make-up Water obligations under the terms of the Long Beach Judgment would be satisfied.

3.2.1.2 MAIN BASIN JUDGMENT

The Upper Area then turned to the task of developing a water resources management plan to optimize the conservation of the natural water supplies of the area. Studies were made of various methods of management of the Main Basin as an adjudicated area and a report thereon was prepared for the Upper San Gabriel Valley Water Association, an association of water producers in the Main Basin. After due consideration by the Association, Upper District was requested to file as plaintiff, and did file, an action on January 2, 1968, seeking an adjudication of the water rights of the Main Basin and its Relevant Watershed. After several years of study (including verification of annual water production) and negotiations, a stipulation for entry of Judgment was approved by a majority of the parties, by both the number of parties and the quantity of rights to be adjudicated. Trial was held in late 1972 and the Judgment (Main Basin Judgment) was entered on January 4, 1973. A copy of the Main Basin Adjudication can be found in Appendix D.

Under the terms of the Main Basin Judgment all rights to the diversion of surface water and production of groundwater within the Main Basin and its Relevant Watershed were adjudicated. The Main Basin Judgment provides for the administration of the provisions of the Main Basin Judgment by a nine-member Basin Watermaster. Six of those members are nominated by water producers (producer members) and three members (public members) are nominated by the Upper San Gabriel Valley Municipal Water District and the San Gabriel Valley Municipal Water District, which overlie most of the Basin. The nine-member board employs a staff, an attorney and a consulting engineer. The Basin Watermaster holds public meetings on a regular monthly basis throughout the year. A copy of the Main San Gabriel Basin Watermaster's Rules and Regulations is located in Appendix E.

The Main Basin Judgment does not restrict the quantity of water, which parties may extract from the Main Basin. Rather, it provides a means for replacing all annual extractions in excess of a Party's annual right to extract water with Supplemental Water.

The Basin Watermaster annually establishes an Operating Safe Yield for the Main Basin which is then used to allocate to each Party its portion of the Operating Safe Yield which can be produced free of a Replacement Water Assessment. If a producer extracts water in excess of its right under the annual Operating Safe Yield, it must pay an assessment for Replacement Water, which is sufficient to the purchase of one acre-foot of Supplemental Water to be spread in the Main Basin for each acre-foot of excess production. All water production is metered and is reported quarterly to the Basin Watermaster.

In addition to Replacement Water Assessments, the Basin Watermaster levies an Administration Assessment to fund the administration of the Basin management program under the Court Judgment and a Make-up Obligation Assessment in order to fulfill the requirements for any make-up Obligation under the Long Beach Judgment and to supply fifty percent of the administration costs of the River Watermaster service. The Basin Watermaster levies an In-lieu Assessment and may levy special Administration Assessments.

Water rights under the Main Basin Judgment are transferable by lease or purchase so long as such transfers meet the requirements of the Judgment. There is also provision for Cyclic Storage Agreements by which Parties and non-parties may store imported supplemental water in the Main Basin under such agreements with the Basin Watermaster pursuant to uniform rules and conditions and Court approval.

The Main Basin Judgment provides that the Basin Watermaster will not allow imported water to be spread in the main part of the Main Basin when the groundwater elevation at the Baldwin Park Key Well³ (Key Well) exceeds 250 feet; and that the Basin Watermaster will, insofar as practicable, spread imported water in the Main Basin to maintain the groundwater elevation at the Key Well above 200 feet. One of the principal reasons for the limitation on spreading imported water when the Key Well elevation

³ The Baldwin Key Well is a water-level monitoring well located in the City of Baldwin Park used to determine when imported water may or may not be spread in the Basin.

exceeds 250 feet is to reserve ample storage space in the Main Basin to capture native surface water runoff when it occurs and to optimize the conservation of such local water. Under the terms of the Long Beach Judgment, any excess surface flows that pass through the Main Basin at Whittier Narrows to the Lower Area (which is then conserved in the Lower Area through percolation to groundwater storage) is credited to the Upper Area as Usable Surface Flow.

3.2.1.3 OPERATIONS OF THE GROUNDWATER BASIN

Through the Long Beach Judgment and the Main Basin Judgment, operations of the Main Basin are optimized to conserve local water to meet the needs of the parties of the Main Basin Judgment.

Upper District is one of the Responsible Agencies from which Basin Watermaster purchases Supplemental Water. The Supplemental Water purchased from Upper District is for groundwater replenishment purposes (Replacement Water for excess production by a Producer) or Make-up Water for delivery to the Lower Area under the terms of the Long Beach Judgment. Upper District sells imported water, delivered by Metropolitan, to its sub-agencies and to the Basin Watermaster. Such water is delivered from Metropolitan's transmission facilities. Imported water can currently be delivered for use by Upper District and its sub-agencies through ten service connections. They are USG-1, USG-2, USG-3, USG-4, USG-5, USG-6, USG-7, USG-8 USG-9 and USG-1T. The latter is a temporary connection.

Imported water is sold by Upper District for three purposes: direct use, groundwater replenishment and Make-Up Water under the terms of the Long Beach Judgment.

Typically, water producers within Upper District rely upon groundwater from Main Basin for their water supply. The City of Alhambra has agreed to receive treated, imported water as part of the Cooperative Water Exchange Agreement (CWEA) to reduce the

groundwater extractions from the western portion of the Main Basin and the associated drawdown concerns.

Imported water for groundwater replenishment is delivered through the flood control channels and diverted and spread at spreading grounds through Basin Watermaster's agreement with the Los Angeles County Department of Public Works (DPW). Groundwater replenishment utilizes imported water and is considered Replacement Water under the terms of the Main Basin Judgment. It can be stored in the Main Basin through Cyclic Storage agreements, authorized by terms of the Main Basin Judgment, but such stored water may be used only to supply Supplemental Water to the Basin Watermaster.

The Basin Watermaster has entered into a Cyclic Storage Agreement with each of the three municipal water districts. One is with Metropolitan and Upper District, which permits Metropolitan to deliver and store imported water in the Main Basin in an amount not to exceed 100,000 acre-feet for future Replacement Water use. The second Cyclic Storage Agreement is with Three Valleys Municipal Water District and permits Metropolitan to deliver and store 40,000 acre-feet for future Replacement Water use. The third is with San Gabriel Valley Municipal Water District (San Gabriel District) and contains generally the same conditions as the agreement with Metropolitan except that the stored quantity is not to exceed 40,000 acre-feet.

Imported Make-up Water has been delivered to lined stream channels and conveyed to the Lower Area. Make-up Water is required to be delivered to the Lower Area by the Upper Area when the Lower Area entitlement under the Long Beach Judgment exceeds the usable water received by the Lower Area. Imported water is used to fulfill the Make-up Water Obligation when the amount of Make-up Water cannot be fulfilled by reimbursing the Lower Area interests for their purchase of recycled water. The amount of recycled water for which reimbursement may be made as a delivery of Make-up Water is limited by the terms of the Long Beach Judgment to the annual deficiency in Lower Area Entitlement water or to 14,735 acre-feet, whichever is the lesser quantity.

3.2.1.4 FIVE-YEAR WATER QUALITY AND SUPPLY PLAN

The Main Basin Watermaster was created in 1973 to resolve water issues that had arisen among water users in the San Gabriel Valley. Basin Watermaster's mission was to generally manage the water supply of the Main San Gabriel Groundwater Basin. During the late 1970s and early 1980s, significant groundwater contamination was discovered in the Main Basin. The contamination was caused in part by past practices of local industries that had carelessly disposed of industrial solvents referred to as Volatile Organic Compounds (VOC's) as well as by agricultural operations that infiltrated nitrates into the groundwater. Cleanup efforts were undertaken at the local, state, and federal level.

Local water agencies adopted a joint resolution in 1989 regarding water quality issues that stated Basin Watermaster should coordinate local activities aimed at preserving and restoring the quality of groundwater in the Main Basin. The joint resolution also called for a cleanup plan. In 1991, the Court granted Basin Watermaster the authority to control pumping for water quality purposes. Accordingly, Basin Watermaster added Section 28 to its Rules and Regulations regarding water quality management. The new responsibilities included development of a Five-Year Water Quality and Supply Plan, updating it annually, submitting it to the California Regional Water Quality Control Board, Los Angeles Region, and making it available for public review by November 1 of each year. A copy of the most recent Five-Year Water Quality and Supply Plan is located in Appendix F.

Basin Watermaster prepares and annually updates the Five-Year Water Quality and Supply Plan in accordance with the requirements of Section 28 of its Rules and Regulations. The objective is to coordinate groundwater-related activities so that both water supply and water quality in the Main Basin are protected and improved. Many important issues are detailed in the Five-Year Plan, including how Basin Watermaster plans to:

1. Monitor groundwater supply and quality;
2. Develop projections of future groundwater supply and quality;

3. Review and cooperate on cleanup projects, and provide technical assistance to other agencies;
4. Assure that pumping does not lead to further degradation of water quality in the Basin;
5. Address Perchlorate, N-nitrosodimethylamine (NDMA), and other emerging contaminants in the Basin;
6. Develop a cleanup and water supply program consistent with the U.S. Environmental Protection Agency (USEPA) plans for its San Gabriel Basin Superfund sites; and
7. Coordinate and manage the design, permitting, construction, and performance evaluation of the Baldwin Park Operable Unit (BPOU) cleanup and water supply plan.

The Basin Watermaster, in coordination with Upper District, has worked with state and federal regulators, along with local water companies to clean up water supplies. Section 28 of the Basin Watermaster's Rules and Regulations require all producers (including Upper District sub-agencies) to submit an application to 1) construct a new well, 2) modify an existing well, 3) destroy a well, or 4) construct a treatment facility. The Basin Watermaster prepares a report on the implications of the proposed activity. Upper District reviews a copy of these reports and is provided the opportunity to submit comments on the proposed activity before the Basin Watermaster Board takes final action. Upper District is involved in discussions between the Basin Watermaster, the USEPA, and potentially responsible parties that are contributing to the cost of groundwater cleanup.

3.2.1.5 UPPER DISTRICT POLICY NO. 9-00-8

Upper District adopted Policy No. 9-00-8 which established criteria and conditions under which the Upper District Board of Directors will consider providing funding, exclusively or in cooperation with WQA, Watermaster and other interested parties, for the construction of water treatment facilities and/or groundwater remediation projects in the Main Basin. This policy also establishes the general manner and methodology by which

such funding can be distributed by Upper District for approved projects and programs. A copy of this policy is in Appendix G.

3.2.1.5.1 POLICY OBJECTIVES

Within its statutory authority, budgetary limitations and policy objectives, Upper District will provide financial assistance for the procurement and/or construction of water treatment facilities at sites in the San Gabriel Valley. The principle objectives are:

1. Optimize utilization of local water resources.
2. Reduce or eliminate local reliance on treated, non-interruptible imported water supplies.
3. Maximize local water supply reliability
4. Provide for wholesale water supply price efficiency.
5. Protect public health and safety.

3.2.1.5.2 POLICY GUIDELINES

Projects to be considered for approval by the Board must meet the guidelines of this program and satisfy certain criteria to qualify for funding under this program. That criterion is listed as follows:

1. The project must be located within the boundaries of Upper District.
2. The project must be considered in a manner so as to reactivate, or maintain operation of, an existing local water source that otherwise could not continue operation because of excessive contamination.
3. The project must be designed such that its operation presents a significant water supply benefit to the public served.
4. The project must be designed such that its operation provides a significant groundwater remediation benefit if applicable.
5. The project must employ proven or CDHS certified treatment technology to allow for a high probability of success.

6. The project must be structured such that either Upper District has a reasonable probability of substantial cost recovery from parties responsible for groundwater contamination, or it addresses an urgent and immediate public health and safety crisis that cannot be resolved in a more efficient and effective manner.
7. The project must be reviewed by Upper District's Engineer.

Funding can be provided in several forms depending upon the circumstances surrounding the project. When structuring the distribution of funds, factors such as the likelihood of cost recovery, the future availability of other sources of funding and the preliminary goals of the project will be considered. To maximize the potential for cost recovery and securing funding from other sources, Upper District project funds will be distributed through the WQA's project accounts where possible.

3.2.1.6 WATER QUALITY AUTHORITY 406 PLAN

Section 406 of the WQA Act requires the WQA "to develop and adopt a basinwide groundwater quality management and remediation plan" that is required to be consistent with the EPA's National Contingency Plan ("NCP") and Records of Decision ("ROD") and all requirement of the Los Angeles Regional Water Quality Control Board ("LARWQCB"). According to the WQA Act, the Section 406 Plan must include:

- 1) Characterization of Basin contamination;
- 2) A comprehensive cleanup plan;
- 3) Strategies for financing the design, construction, operation and maintenance of groundwater cleanup facilities;
- 4) Provision for a public information program; and
- 5) Coordination of activities with federal, state, and local entities.

WQA reviews and adopts the Section 406 Plan on an annual basis and as necessary, makes revisions according to changing regulatory, political and/or funding environments. A copy of the WQA 406 Plan is located in Appendix H.

In support of the Section 406 Plan, WQA also adopts an annual fiscal year budget (July 1 through June 30) which includes all projects (actual or planned) WQA is facilitating through its participation during that time period. The budget identifies the various funding sources, and combinations thereof, to ensure full funding for each project (capital and/or O&M) can be achieved.

3.2.2 DESCRIPTION OF GROUNDWATER BASIN

The San Gabriel Valley is located in southeastern Los Angeles County and is bounded on the north by the San Gabriel Mountains; on the west by the San Rafael and Merced Hills, on the south by the Puente Hills and the San Jose Hills, and on the east by a low divide between the San Gabriel River system and the Upper Santa Ana River system, as shown on Plate 3.

The San Gabriel River and its distributary, the Rio Hondo, drain an area of about 490 square miles upstream of Whittier Narrows. Whittier Narrows is a low gap between Merced and Puente Hills, just northwest of the City of Whittier, through which the San Gabriel River and the Rio Hondo flow to the coastal plain of Los Angeles County. Whittier Narrows is a natural topographic divide and a subsurface restriction to the movement of groundwater between the Main San Gabriel Basin and the Coastal Plain. The 490 approximate square miles of drainage area upstream of Whittier Narrows is about 167 square miles of valley lands and about 323 square miles of mountains and foothills.

The Main Basin includes essentially the entire valley floor of San Gabriel Valley with the exception of the Raymond Basin and Puente Basin. The boundaries of the Main Basin are the Raymond Basin on the northwest, the base of the San Gabriel Mountains on the north, the groundwater divide between San Dimas and La Verne and the lower boundary of the Puente Basin on the east, and the common boundaries between Upper District and Central District through Whittier Narrows on the southwest. The common water supply of the Main Basin does not include the Raymond Basin, the area northerly of Raymond Hill Fault, which was adjudicated in the Pasadena v. Alhambra case (Superior Court of the

County of Los Angeles, 1944). The Puente Basin, although tributary to the Main Basin, is not included in the Main Basin administered by the Basin Watermaster.

The Main Basin (administered by the Main Basin Watermaster) is a large groundwater basin replenished by stream runoff from the adjacent mountains and hills, by rainfall directly on the surface of the valley floor, subsurface inflow from Raymond Basin and Puente Basin, and by return flow from water applied for overlying uses. Additionally, the Main Basin is replenished with imported water. The Main Basin serves as a natural storage reservoir, transmission system and filtering medium for wells constructed therein.

There are three municipal water districts overlying and/or partially overlying the Main Basin. The three districts are Upper District, San Gabriel District, and Three Valleys Municipal Water District (TVMWD). The boundaries of these water districts are shown on Plate 2.

Urbanization of the San Gabriel Valley began in the early part of the twentieth century, but until the 1940's, agricultural land use occupied more area than residential and commercial land use. After World War II agricultural areas reduced rapidly and are now less than two thousand acres. The agricultural areas tend to be located in the easterly portion of the Main Basin and along power transmission rights of way adjacent to the San Gabriel River. Agricultural plots are discontinuous and relatively small. There are several major industrial areas adjacent to the San Gabriel River and within other portions of the valley. The greatest area of land use in the valley is for residential and commercial purposes.

3.2.3 GEOLOGY

The Main Basin consists of a roughly bowl-shaped depression of bedrock, filled over millions of years with alluvial deposits. This bowl-shaped depression is relatively deep; the elevation at the base of the groundwater reservoir declines from about 800 feet above mean sea level (MSL) in the vicinity of San Dimas, at the northeast corner of the Main

Basin, to about 2,200 feet below MSL in the vicinity of South El Monte. (California Department of Water Resources, 1966, Plate II.)

Most of the alluvium deposited within this depression is debris from the San Gabriel Mountains, washed and blown down from the side of the mountains over time. This process has also resulted in the materials of the Main Basin varying in size from relatively coarse gravel nearer the mountains to fine and medium-grained sand containing silt and clay as the distance from the mountains increases. The principal water-bearing formations of the Main Basin are unconsolidated and semi-consolidated sediments, which vary in size from coarse gravel to fine-grained sands. The interstices between these alluvial particles throughout the Main Basin fill with water and transmit water readily to wells. The thickness of the water-bearing materials in the Main Basin ranges from 200 to 300 feet in the northeastern portion of the Main Basin near the mountains (Los Angeles County Department of Public Works, 1934, page 141.) to nearly 4,000 feet in the South El Monte area. (California Department of Water Resources, 1966, page 31.)

The soils overlying the Main Basin average about six feet in depth. Soil depths are generally greater at the perimeter of the valley and decrease toward the center along the San Gabriel River. These soils are residual, formed in place through chemical, mechanical and plant weathering processes. The infiltration rates of these soils are greater along the natural channels and their adjacent flood plains. Lower infiltration rates are found in the perimeter areas of the valley. Since the valley is mostly urbanized, a significant portion of the area has been paved and many miles of stream channel have been lined for flood control purposes, thus decreasing infiltration of water through streambeds. Detailed basin geology is discussed in the report entitled "Planned Utilization of Ground Water Basins, San Gabriel Valley, Appendix A: Geo-hydrology" (California Department of Water Resources, 1966).

3.2.4 HYDROLOGY

The total fresh water storage capacity of the Main Basin is estimated to be about 9.5 million acre-feet. Of that, about 1,100,000 acre-feet have been used historically in Main Basin operations. The change in groundwater elevation at the Key Well is representative of changes in groundwater in the Main Basin. One foot of elevation change at the Key Well is roughly the equivalent of about 8,000 acre-feet of water storage. The location of the Key Well is shown on Plate 3 and the hydrograph of the Key Well is shown on Figure 2.

The historic high groundwater elevation was recorded at over 329.1 feet in April 1916, at which time Main Basin storage was estimated to be about 8,700,000 acre-feet. The historic low was recorded in December 2004 at 195.5 feet, at which time Main Basin storage was estimated to be about 7,600,000 acre-feet. The Key Well hydrograph shown on Figure 2 illustrates the cyclic nature of basin recharge and depletion. The hydrograph also illustrates the dramatic recharge capability of the Main Basin during wet periods.

Generally, water movement in the Main Basin is from the San Gabriel Mountains on the north to Whittier Narrows to the southwest, as shown on Plate 4. Groundwater movement in the northern and northeastern regions of the Main Basin is affected by faulting. For example, the Raymond Fault located in the northwesterly portion of the Main Basin separates the Raymond Basin from the Main Basin.

The Main Basin is an unconfined aquifer. Although clay deposits appear mixed with the soils in several locations in the Main Basin and there are various clay lenses throughout the Main Basin, they do not coalesce to form a single impermeable barrier for the movement of subsurface water. The Main Basin therefore operates as a single, unconfined aquifer. As previously mentioned, a thorough discussion of basin hydrogeology is contained in the report "Planned Utilization of Ground Water Basins, San Gabriel Valley, Appendix A: Geo-hydrology" (California Department of Water Resources, 1966).

Within the Main Basin there are a number of identified sub-basins. These include the Upper San Gabriel Canyon Basin, Lower San Gabriel Canyon Basin, Glendora Basin,

Foothill Basin, Way Hill Basin and San Dimas Basin. In addition, the Puente Basin is tributary to the Main Basin from the southeast, between the San Jose and Puente Hills. Plate 3 shows the location of the sub-basins within the Main Basin.

3.2.5 GROUNDWATER RECHARGE

The major sources of recharge to the Main Basin are direct penetration of rainfall on the valley floor, percolation of runoff from the mountains, percolation of imported water and return flow from applied water. Rainfall occurs predominantly in the winter months and is more intense at higher elevations and closer to the San Gabriel Mountains. Table 2 shows historic annual rainfall, which is highly variable from year to year, in the San Gabriel Valley.

In water year 1960-61 the total rainfall (four station average) was less than six inches, while in 1982-83 the total rainfall (four station average) was nearly 40 inches, as shown on Table 2.

The magnitude of annual recharge from direct penetration of local rainfall and return flow from applied water is not easily quantifiable. Percolation of runoff from the mountains and valley floor along with percolation of imported water has only been estimated. The DPW maintains records on the amount of local and imported water conserved in water spreading facilities and stream channels.

The San Gabriel River bisects the Main Basin. The San Gabriel River originates at the confluence of its west and east forks in the San Gabriel Mountains. It flows through the San Gabriel Canyon and enters the Main Basin at the mouth of the canyon north of the City of Azusa. The San Gabriel River flows southwesterly across the valley to Whittier Narrows, a distance of about 15 miles. It exits San Gabriel Valley at Whittier Narrows, and transverses the Coastal Plain in a southerly direction to reach the Pacific Ocean at Alamitos Bay near the City of Long Beach.

The San Gabriel River is joined and fed by tributary creeks and washes. In the Main Basin these include: Big Dalton Wash, which originates in the San Gabriel Mountains;

Walnut Creek, which originates at the northeast end of the San Jose Hills; and San Jose Creek, which originates in the San Gabriel Mountains, but which travels around the southerly side of the San Jose Hills through the Puente Narrows before joining the San Gabriel River just above Whittier Narrows.

The channel of the San Gabriel River bifurcates in the upper middle portion of the Main Basin, forming a channel to the west of and parallel to the San Gabriel River, known as the Rio Hondo. Tributaries draining the westerly portion of the Main Basin, including Sawpit Wash, Santa Anita Wash, Eaton Canyon Wash, Rubio Wash and Alhambra Wash, all of which originate in the San Gabriel Mountains or the foothills, feed the Rio Hondo. The Santa Anita Wash, Eaton Canyon Wash, Rubio Wash and Alhambra Wash all cross the Raymond Basin area before entering the Main Basin. The channel of the Rio Hondo passes through Whittier Narrows westerly of the San Gabriel River, and then flows southwesterly to join the Los Angeles River on the Coastal Plain.

To protect residents of the San Gabriel Valley from flooding that can result during periods of intensive rainfall, the DPW and the U.S. Army Corps of Engineers (Corps of Engineers), have constructed an extensive system of dams, debris basins, reservoirs and flood control channels, which are shown on Plate 3. The dams and reservoirs also operate as water conservation facilities. The dams and reservoirs that control the flow of the San Gabriel River and the Rio Hondo include: Cogswell Reservoir on the west fork of the San Gabriel River, San Gabriel Reservoir at the confluence of the west and east forks of the San Gabriel River, Morris Reservoir near the mouth of the San Gabriel Canyon, Santa Fe Reservoir in the northerly portion of the Main Basin and Whittier Narrows Reservoir at the southwestern end of San Gabriel Valley.

Many of the stream channels tributary to the San Gabriel River have been improved with concrete banks (walls) and concrete-lined bottoms. These stream channel improvements have significantly reduced the area of previous stream channels and reduce Main Basin recharge. A number of off-stream groundwater replenishment facilities have

been established along these stream channels to offset such reductions in recharge. The locations of these water spreading facilities are shown on Plate 3. Some of these facilities are accessible to imported water supplies, while some facilities receive only local runoff.

The paths of the surface streams are mirrored in the soils and in the direction of groundwater movement in the Main Basin. The tributary creeks and washes, carrying smaller amounts of water, generally flow toward the center of the San Gabriel Valley, while the direction of flow of the major streams, the San Gabriel River and the Rio Hondo, is from the mountains in the north to Whittier Narrows in the southwest. In similar fashion, the primary direction of groundwater movement in the Main Basin is from the north to the southwest, with contributing movement generally from the east and west toward the center of the Main Basin as shown on Plate 4. The greatest infiltration and transmissivity rates of soils in the Main Basin are from north to south, with the maximum rates found in the center of the valley along the stream channels. Generally, the Main Basin directs groundwater to the southwest through Whittier Narrows.

3.2.6 LOCATION, AMOUNT AND SUFFICIENCY OF GROUNDWATER

Upper District is a wholesale supplier of treated and untreated imported water, and recycled water for direct use. Although Upper District does not produce groundwater, all of its sub-agencies do. As noted in Section 3.2 the Main Basin is managed by the Basin Watermaster. Section 42, Basin Operating Criteria, of the Main Basin Judgment states in part "...Watermaster shall not spread Replacement Water when the water level at the Key Well exceeds Elevation two hundred fifty (250), and Watermaster shall spread Replacement Water, insofar as practicable, to maintain the water level at the Key Well above Elevation two hundred (200)." Figure 2 shows the historic fluctuation of the Key Well elevation and illustrates since the Main Basin was adjudicated in 1973, it generally operated between an elevation 250 feet and 200 feet msl. Furthermore, at elevation 200 feet msl at the Key Well, the Main Basin has about 7,600,000 acre-feet of available storage. During the period of management under the Judgment, significant drought events have occurred from 1969 to 1977, 1983 to 1991 and 1998 to 2004. In each drought cycle

the Main Basin has managed to maintain water levels. **Based on historic management practices, all pumpers from the Main Basin have adequate supply from the Main Basin over the next 20 years under single and multiple droughts.**

3.3 RELIABILITY OF SUPPLY

Section 10631

c) *Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage, to the extent practicable, and provide data for each of the following:*

- 1) *An average water year.*
- 2) *A single dry water year.*
- 3) *Multiple dry water years.*

For any water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climatic factors, describe plans to supplement or replace that source with alternative sources or water demand management measures, to the extent practicable.

The reliability of future supplies of imported supplemental water to Upper District from Metropolitan is directly dependent upon the sources of supply available to Metropolitan. Table 1 provides a summary of the historic sources of water supply available to Metropolitan from 1995 through 2004. The draft 2005 RUWMP prepared by Metropolitan should be referred to for more details on projected sources of water supply available to Metropolitan and the reliability of those sources. A summary of available water supplies during an average water year, a single dry year and multiple dry years over the next 20 years in five-year increments are included as Tables II-4 through II-6 of Metropolitan's draft 2005 RUWMP and are shown in Appendix I of this Plan. Metropolitan indicates it will meet its water demands for the next 20 years during an average water year, a single dry year and multiple dry years.

3.4 TRANSFERS AND EXCHANGES OF WATER

Section 10631

d) *Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.*

Upper District participates in a long-term Cooperative Water Exchange Agreement (CWEA) with the City of Alhambra, Metropolitan, San Gabriel District and the Basin

Watermaster. Upper District is the representative member agency for Metropolitan in that exchange.

The CWEA was negotiated to solve a local problem near the City of Alhambra, referred to as the Alhambra Pumping Hole. The Alhambra Pumping Hole is located in an area of the Main Basin that gets little replenishment due to its location and hydrogeologic characteristics. Seven producers extract water from the Alhambra Pumping Hole and this resulted in declining water level elevations. Six of the producers are sub-agencies of Upper District. The seventh producer, the City of Alhambra, is a member agency of San Gabriel District. This exchange is cooperatively financed by the City of Alhambra, San Gabriel District and Upper District. It was agreed the City of Alhambra would receive direct delivery of water from Metropolitan and in exchange would reduce its extractions from the Alhambra Pumping Hole by an equivalent quantity. Currently, the Basin Watermaster levies an In-lieu Assessment to provide reimbursement to the City of Alhambra for increased incremental costs, which are incurred by the City.

Upper District, through Metropolitan, is active in the long-term cyclic storage of water in the Main Basin. Chapter 4 of this Plan describes the Cyclic Storage Agreement in greater detail. Metropolitan is able to deliver water for groundwater replenishment purposes in advance of Upper District's specific requirement for such water. Water delivered to the Main Basin in advance of its requirement is credited to the Cyclic Storage Account and the credited deliveries are accrued from year to year. When the Basin Watermaster requires Replacement Water from Upper District, a transfer can then be made from the Cyclic Storage Account to Basin Watermaster in-lieu of actual delivery of imported water for that purpose, at the discretion of Metropolitan. Because water is often in Cyclic Storage for many years before being required as Replacement Water, the Cyclic Storage program, although technically a conjunctive use operation, may be considered an exchange or transfer program in that it takes advantage of surplus water, when available, and stores it in the Main Basin for future use.

Chapter 4

PAST, CURRENT AND PROJECTED WATER USE

4.1 PAST AND CURRENT WATER USE

Section 10631

(e) (1) Quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, identifying the uses among water use sectors including, but not necessarily limited to, all of the following uses:

- (A) Single-family residential.*
- (B) Multifamily.*
- (C) Commercial.*
- (D) Industrial.*
- (E) Institutional and governmental.*
- (F) Landscape.*
- (G) Sales to other agencies.*
- (H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof.*
- (I) Agricultural*

Upper District is a wholesaler and maintains records of its wholesale water sales only. From these records it is not possible to identify water uses by customer group. Such records would be available from retail urban water suppliers, which purchase water from Upper District. The water sales by Upper District are broken down into four water use categories 1) direct use, 2) groundwater replenishment, 3) Make-up Water (Long Beach Judgment) and 4) recycled water. There are no other additional current or projected uses of water. A summary of Upper District's water sale records is presented on Table 3.

Upper District is a member agency of Metropolitan. Upper District receives imported supplemental water from Metropolitan and supplies such water to its sub-agencies, the urban water suppliers, and to the Basin Watermaster. In addition, the sub-agencies of Upper District also have rights to water supplies of the Main Basin and its relevant watershed.

Upper District delivers imported supplemental water through Metropolitan's distribution system, which utilizes nine service connections to deliver imported water to local urban water suppliers. Upper District uses the USG-3 connection solely for groundwater replenishment deliveries. The following list the local supplier along with the service connection used by Upper District to deliver water. The owner, maximum capacity, service line feeder and designated use for each service connection are listed in Table 4. The locations of the service connections are shown on Plate 1.

- USG-1: Southern California Water Company
- USG-2: City of South Pasadena
- USG-3: Upper San Gabriel Valley Municipal Water District
- USG-4: Suburban Water Systems
- USG-5: City of Alhambra
- USG-6: City of Arcadia
- USG-7: City of Monrovia
- USG-8: City of Azusa
- USG-9: Valley County Water District

Water deliveries that have been made through Upper District's service connections during fiscal years 1973-74 through 2003-04 are shown on Table 5. Direct deliveries for domestic use are made through USG-1T, USG-1, USG-2, USG-4, USG-5, USG-6, USG-7, USG-8, and USG-9. Deliveries of imported water for groundwater replenishment are generally made through USG-3 but, at times, are made through CenB-48 and USG-SGP. Deliveries for groundwater replenishment are made as Replacement Water for overproduction in accordance with the terms of the Main Basin Judgment, either directly as Replacement Water or to Cyclic Storage for future Replacement Water. Make-up Water deliveries to the Lower Area are usually made through CenB-28, CenB-36 and CenB-48. Connections CenB-28, CenB-36 and CenB-48 are owned by Central District, but at times are made available for use by Upper District. Historic water production within Upper District, imported water supplied for

direct use, Main Basin replenishment and recycled water use are summarized on Table 6, and the historic total water for direct use is shown on Figure 3.

Using the historic water use records (water production and direct use) shown on Table 6 and the historic population presented in Chapter 2, the amount of gallons of water used per capita per day within Upper District's service area was calculated. Figure 5 shows the total amount of gallons per capita per day (gpcd) used within Upper District's service area for fiscal years 1992-93 through 2003-04. According to annual reports filed by water agencies to the Department of Water Resources (DWR), the current statewide average gpcd is about 187. The total amount of gpcd used within Upper District service area is historically greater than the statewide average, which is partially the impact of a warmer dryer climate in Southern California. With implementation of conservation measures (discussed in Chapter 5), the gpcd value within Upper District has been reduced. As shown on Figure 5, since Upper District's last UWMP in 2000, the gpcd within its service area has improved due to water conservation programs. With the future implementation of current conservation measures, Upper District anticipates a decrease in the gpcd used within its service area as it customers are informed of the importance of water conservation and methods to eliminate water waste.

Upper District currently has a Cyclic Storage agreement with Basin Watermaster. Cyclic Storage water is pre-delivery of Replacement Water. Cyclic Storage water deliveries are made in advance of actual Replacement Water requirements for overproduction so that water will be available for future Replacement Water requirements. Under the terms of Cyclic Storage agreements, the Responsible Agencies and Individual Producers may make deliveries to Watermaster out of their Cyclic Storage accounts or by direct delivery of imported supplemental water to satisfy Replacement Water obligations. Table 7 is a summary of annual accounting in the Metropolitan/ Upper District Cyclic Storage account from fiscal year 1975-76 through fiscal year 2003-04.

In December 2003, Upper District created a Long-term Cyclic Storage Service Pilot Program to provide a pricing incentive to Upper District's sub-agencies to purchase and store replenishment water for future use and creating reserves for drought protection. During fiscal year 2003-04 10,000 acre-feet was transferred to individual Producer Cyclic Storage accounts under the Long-term Cyclic Storage Service Pilot Program. Upper District has made an additional 7,500 acre-feet available to producers during fiscal year 2004-05. Water purchased must remain stored in Producer Cyclic Storage accounts for at least one year and as long as five years to qualify for the pricing discount.

As discussed in Chapter 3, the Main Basin is a well-managed groundwater basin that depends on the elevation of the Key Well to determine when imported water may or not be spread in the Main Basin. If water levels are over 250 feet, Watermaster is unable to deliver Replacement Water and Replacement Water requirements will be accomplished through transfers from Upper District's Cyclic Storage account to Producer Cyclic Storage accounts.

4.2 PROJECTED WATER USE

Section 10631

(2) The water use projections shall be in the same five-year increments described in subdivision (a).

Upper District is a wholesale water provider who does not directly use water or deliver water to retail customers. However, Upper District delivers imported water and recycled water to its sub-agencies who in turn provide that water to retail customers. Upper District's sub-agencies rely on both the water supply from Upper District and the water produced from the Main Basin as their total water supply for direct use.

Since the Main Basin was adjudicated in 1973, it generally operated between an elevation 250 feet and 200 feet msl (Figure 2). Water production during that time,

including both groundwater and surface water, has varied annually from about 190,000 acre-feet to about 245,000 acre-feet. During 2003-04, water production within the Main Basin was about 206,000 acre-feet as shown on Table 6.

The total annual quantity of water for direct use, including Main Basin water production and direct deliveries of imported water, has varied from about 174,000 acre-feet to almost 250,000 acre-feet, as shown on Table 6. Imported water for direct use has varied from about 180 acre-feet in 1973-74 to almost 25,000 acre-feet in 2003-04, but has averaged about 14,000 acre-feet during the past five years (Table 6).

In addition, the total amount of recycled water use within Upper District has varied from about 1,362 acre-feet to 3,919 acre-feet. Recycled water use within Upper District started in 1990-91 with about 1,522 acre-feet and reached 3,919 acre-feet in 2003-04, as shown on Table 6.

Upper District prepared water use projections for the next 20 years using the historic water use trends (Figure 3) of the previous years. Figure 4 shows the projected water use for the next 20 years. A summary of projected water use within Upper District is shown on Table 8.

Chapter 5

CURRENT CONSERVATION MEASURES

Section 10631

- (f) Provide a description of the supplier's water demand management measures. This description shall include all of the following:*
- (1) A description of each water demand management measure that is currently being implemented, or scheduled for implementation, including the steps necessary to implement any proposed measures, including, but not limited to, all of the following:*
 - (A) Water survey programs for single-family residential and multi-family residential customers.*
 - (B) Residential plumbing retrofit.*
 - (C) System water audits, leak detection, and repair.*
 - (D) Metering with commodity rebates for all new connections and retrofit of existing connections.*
 - (E) Large landscape conservation programs and incentives.*
 - (F) High-efficiency washing machine rebate programs.*
 - (G) Public information programs.*
 - (H) School education programs.*
 - (I) Conservation programs for commercial, industrial and institutional accounts.*
 - (J) Wholesale agency programs.*
 - (K) Conservation pricing.*
 - (L) Water conservation coordinator.*
 - (M) Waster waste prohibition.*
 - (N) Residential ultra-low-flush toilet replacement programs*
 - (2) A schedule of implementation for all water demand management measures proposed or described in the plan.*
 - (3) A description of the methods, if any, that the supplier will use to evaluate the effectiveness of water demand management measures implemented or described under the plan.*
 - (4) An estimate, if available, of existing conservation savings on water use within the supplier's service area, and the effect of the savings on the supplier's ability to further reduce demand.*
- (j) Urban water suppliers that are members of the California Urban Water Conservation Council and submit annual reports to that council in accordance with the "Memorandum of Understanding Regarding Urban Water Conservation in California," dated September 1991, may submit the annual reports identifying water demand management measures currently being implemented, or scheduled for implementation, to satisfy the requirements of subdivision (f) and (g)*

Upper District is a member of the California Urban Water Conservation Council (CUWCC). As a member of the CUWCC, Upper District signed a Memorandum of Understanding pledging to implement "Best Management Measures", which are cost-effective conservation programs. For purposes in this Plan the Best Management

Practices (BMPs) are equivalent to Demand Management Measures (DMM). According to the UWMP Act, water suppliers that are members of the CUWCC may submit their most recent annual reports to satisfy the requirements of subdivision (f) and (g). Upper District's most recent annual reports, along with CUWCC's coverage reports, are included in this Plan as Appendix J. A brief description of Upper District's conservation measures and DMMs follow.

5.1 CURRENT IMPLEMENTED DEMAND MANAGEMENT MEASURES

Section 10631

f) (1) A description of each water demand management measure that is currently being implemented, or scheduled for implementation, including the steps necessary to implement any proposed measures, including, but not limited to, all of the following:

5.1.1 RESIDENTIAL PLUMBING RETROFIT (10631f(1)(B))

Upper District conducts annual residential plumbing retrofit programs throughout its service area in cooperation with Metropolitan. Upper District's residential plumbing retrofit programs consist of ultra-low-flush toilets (see Section 5.1.11) and high-efficiency clothes washers (see section 5.1.7). Upper District conducts several scheduled events each year for the distribution of ultra-low-flush toilets. Information regarding this program is also located in Metropolitan's draft 2005 RUWMP which is incorporated by reference.

5.1.2 SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR (10631f(1)(C))

Upper District does not have its own distribution system, and relies on Metropolitan's distribution system. Metropolitan conducts various system water leak detection programs for its entire system. Additional information regarding system water audits, leak detection and repair can be found in Metropolitan's draft 2005 RUWMP, which is incorporated by reference.

5.1.3 METERING WITH COMMODITY RATES (10631f(1)(D))

Upper District, in coordination with Metropolitan, meters all water sales for direct use, groundwater replenishment, Make-up Water and recycled water. A copy of Upper District's current rate schedule is located in Appendix K.

5.1.4 LARGE LANDSCAPE CONSERVATION PROGRAMS AND INCENTIVES (10631f (1) (E))

Upper District's large landscape conservation program included retrofitting the irrigation system at the Olive Park Middle School Sports Park (Olive Park) located in the City of Baldwin Park. The program consisted of two phases. Phase 1 was completed in March 2003 and Phase 2 was completed in November 2003. Upper District's program at Olive Park included the installation of new "Best Available Technology" (BAT) irrigation systems that adjust the amount of water applied to the fields by tracking the daily evapotranspiration rates. The irrigation system is connected to the internet and communicates daily to local weather reports. Based on the current weather conditions the system makes automatic adjustments on the amount of water used in the most efficient manner. Additional information on Upper District's large landscape conservation project can be found on its website (www.usgvmwd.org) and in Appendix L.

In addition, Upper District and Metropolitan are financially participating in a Synthetic Turf Grant Program. Currently, grants have been provided to two high schools within Upper District to install synthetic turf with the goal to permanently reduce irrigation demands. Although these projects have not been constructed and savings data is not available, it is anticipated the water savings could be up to 4 acre-feet per acre per year.

5.1.5 HIGH-EFFICIENCY WASHING MACHINE REBATE PROGRAMS (10631f (1) (F))

Upper District, in partnership with Metropolitan, State Department of Water Resources, CalFed Bay Delta Program and the U.S. Bureau of Reclamation, offers a residential high-efficiency clothes washer rebate program. Residential dwellings (single-family homes, condominiums, townhouses, apartments or mobile homes) that are located within Upper District's service area can install a high-efficiency washing machine in place of standard-efficiency washing machine for a rebate. High-efficiency washers can use up to 50 percent less water and 50 percent less energy compared to standard-efficiency washers. Residences that install a high-efficiency washing machine will receive a rebate for their water conservation measures. The rebate level per washer in 2003-04 and 2004-05 was \$325. The rebate level in 2005-06 was established at \$275. Additional information on Upper District's water efficient landscape project can be found on its website and in Appendix L.

5.1.6 PUBLIC INFORMATION PROGRAMS (10631f (1) (G))

Upper District promotes water conservation through its many public information programs. Upper District offers conservation brochures and posters, activity booklets, public outreach displays, oral presentations, and workshops to inform the public of conservation efforts. Upper District also raises awareness about water conservation through paid advertising, press releases, news ads, media events, and through the Speaker's Bureau. Annually, Upper District hosts a water awareness festival (Water Fest) to raise public awareness about water conservation, water quality and other water-related issues. Additional information regarding Upper District's public information programs is located in the CUWCC annual reports in Appendix J and also can be found on its website (Appendix L).

In addition, Upper District offers classes in landscape water management to landscape professionals. The classes address 1) Irrigation Principles, 2) Irrigation

System Troubleshooting, 3) Controller Programming and 4) Irrigation Scheduling. A course description is included in Appendix L.

5.1.7 SCHOOL EDUCATION PROGRAMS (10631f (1) (H))

Upper District directly offers school education programs in an effort to raise awareness of water issues. Upper District started its school education programs in September 1992 and the materials and presentations meet state education framework requirements. The following is a list of Upper District's school educational programs. More information about these programs is located in its annual reports (Appendix J).

- Water Awareness Art Contests
- Annual Art Poster Contest for grades K through 3rd and 4th through 6th
- T-shirt Art Contest for grades 7th through 12th
- Water Resource Library

Upper District also participates in additional educational school programs through Metropolitan, which has extensive educational programs that includes schools within Upper District's boundaries. Metropolitan's educational programs meet state education framework requirements. A list of Metropolitan's school education programs is included in Metropolitan's draft 2005 RUWMP, which is incorporated by reference.

5.1.8 CONSERVATION PROGRAMS FOR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL (10631f (1) (I))

Upper District offers a conservation program for commercial, industrial and institutional facilities (CII). Upper District's program offers commercial, industrial and institutional facilities rebates for retrofitting existing high water-use fixtures with efficient water-use fixtures. The CII program includes the following fixtures.

1. Ultra-low flush (ULF) Toilets – rated at 1.6 gallons per flush (gpf) or less. The rebate covers the entire fixture including the bowl and either the tank or the flush valve hardware.
2. Ultra-low flush Urinals – rated at 1.0 gpf or less. Waterless urinals also qualify.
3. Flush Valve Kits – are considered a complete retrofit only when retrofit of an existing toilet or urinal is proven to be not cost-effective.
4. Cooling Tower Conductivity Controllers – must be installed on an existing tower not originally equipped with a controller or on a faulty controller.
5. Coin- or Card-Operated High-Efficiency Clothes Washer – must be installed in a commercial setting as a replacement for traditional vertical-axis washers.
6. Automatic Faucet Shut-Off Valves – applies to pre-rinse spray types used in commercial settings that are replacing non-automatic shut-off valves, malfunctioning automatic shut-off valves or high-volume automatic shut-off valves.
7. Hospital X-Ray Processor Recirculating System – must be installed on an approved x-ray processor.
8. Water Pressurized Broom – must be replacing a hose and nozzle application or other high pressure washing device.

Additional information regarding Upper District's CII program can be found in Appendix L of this plan and on its website.

5.1.9 WHOLESALE AGENCY PROGRAMS (10631f (1) (J))

As a wholesaler, Upper District participates in wholesale agency programs, which provide financial incentives for water conservation, technical support through workshops, and available staff for conservation projects.. Upper District provides financial incentives for water conservation through its many retrofit programs that replace high water-use fixtures with efficient water-use fixtures. Upper District provides technical support by conducting workshops for various water conservation programs.

They also provide support through available staff assigned to direct conservation measures. Regional programs are also in place that local agencies can participate in to encourage water conservation. Information regarding Upper District's wholesale agency programs is located in both Appendix J and L.

5.1.10 CONSERVATION PRICING (10631f (1) (K))

Upper District's conservation pricing program includes the following four programs: Tiered rate structure, Long-term Cyclic Storage, Replenishment Service and Recycled Water. The following provides a description of each conservation pricing program currently being implemented by Upper District. Additional information about Upper District's conservation pricing is located in the CUWCC annual reports (Appendix J).

5.1.10.1 TIERED RATE STRUCTURE

Upper District participates in a tiered rate structure through Metropolitan's tiered supply rates. Upper District obtains water from Metropolitan for direct deliveries and through that process passes on Metropolitan's rate structure. Metropolitan's tiered rate structure encourages the development of cost-effective local water resources, including conservation, water recycling, groundwater recycling and desalination. Metropolitan's rate structure includes both Tier 1 and Tier 2 treated water sales.

The Tier 1 Supply Rate is charged on a dollar per acre-foot basis for system supply delivered to meet demands that are less than 90 percent of a member agency's historical base period deliveries (for member agencies with elective purchase orders). The Tier 1 Supply Rate is charged to system supply deliveries that are less than 60 percent of a member agency's historical base period deliveries (for member agencies without elective purchase orders) The District's Tier 1 Treated Water Rate is currently \$484.23/AF for 2005, and proposed to be \$495.76/AF for 2006, rising to \$518.13/AF for 2007 and 2008, and reaching \$523.31/AF for 2009.

Metropolitan's Tier 2 Supply Rate is charged on a dollar per acre-foot basis for system supply delivered in excess of 90 percent of a member agency's base for member agencies with purchase orders. The Tier 2 Supply Rate is charged for system supply delivered in excess of 60 percent of a member agency's base for member agencies without purchase orders. Upper District will have an unrestricted allotment of Metropolitan's Treated Tier 2 supply. Once the total allotment of Treated Tier 1 supply (16,511.6 AF) is utilized, all treated water sold will be at Upper District's Tier 2 Treated Water Rate. Upper District's Tier 2 Treated Water Rate for 2004 is \$537.60/AF and has been set at \$569.28/AF for 2005.

5.1.10.2 LONG-TERM CYCLIC STORAGE

The recently implemented Long-term Cyclic Storage program allows retail agencies to purchase untreated imported water at a reduced rate to store in the Basin for a period of up to five years. The stored water creates a drought reserve that can be utilized to mitigate future imported water supply shortages. This program helps water utilities meet their potential future water demands by pre-purchasing and storing imported water that they can later use to supplement existing groundwater supply. Chapter 4 of this Plan provides additional information on Long-term Cyclic Storage.

5.1.10.3 REPLENISHMENT SERVICE

Upper District purchases Replenishment Service water for groundwater recharge from Metropolitan. Through Metropolitan's Replenishment Service water program, water used for groundwater recharge can be purchased at a discounted price. Upper District in turn passes on the discounted water price to its member agencies. More information regarding Metropolitan's Replenishment Service can be found in its draft 2005 RUWMP.

5.1. 10.4 RECYCLED WATER

As will be noted in Chapter 8, Upper District is involved in a variety of recycled water programs. As an economic incentive, Upper District sells its Recycled Water at no more than 90 percent of the Replenishment Service rate.

5.1.11 WATER CONSERVATION COORDINATOR (10631f (1) (L))

Upper District employs a conservation coordinator to promote water conservation issues and programs. The conservation coordinator position was created in September 1992 as a full time position. Additional information about Upper District's conservation coordinator can be found in the annual reports located in Appendix J.

5.1.12 WATER WASTE PROHIBITION (10631f(M))

Upper District is a wholesale water agency, which does not supply water to residential customers, and therefore cannot regulate residential water use. However, Upper District passed Resolution 6-90-266 in 1990 to reduce water demands within its service area. A copy of Resolution 6-90-266 is located in Appendix N. In addition, Upper District has prepared a draft Urban Water Shortage Contingency Resolution that may be adopted in case of an emergency which will require mandatory reductions in water use within Upper District's service area. A copy of Upper District's draft Urban Water Shortage Contingency Plan is located in Appendix M.

5.1.13 RESIDENTIAL ULTRA-LOW-FLUSH TOILET REPLACEMENT PROGRAMS (10631f (1) (N))

The Ultra Low Flush Toilet (ULFT) Retrofit Program is one of several water conservation programs implemented by Upper District. The ULFT program allows any resident, within Upper District boundaries, to obtain up to two free ULFTs for their home. The program is open to both single-family and multi-family residents whether they own or rent. The ULFT program typically utilizes local high schools located within Upper District boundaries to assist in implementing the program. Participating schools are

typically selected through a lottery-style process. The number of schools selected to participate annually depend on the amount of ULFTs that funds have been allocated for in a given fiscal year. A contracted program consultant is retained by the Upper District to work with the selected schools in administering the program and directing field operations. The cost of the ULFT is funded by Upper District and Metropolitan. Information on the ULFT program is included in Appendix M.

5.2 DEMAND MANAGEMENT MEASURES NOT IMPLEMENTED

Section 10631

(g) An elevation of each water demand management measure listed in paragraph (1) of subdivision (f) that is not currently being implemented or scheduled for implementation. In the course of the evaluation, first consideration shall be given to water demand management measures, or a combination of measures, that offer lower incremental costs than expanded or additional water supplies. This evaluation shall do all of the following:

- (1) Take into account economic and non-economic factors, including environmental, social, health, customer impact, and technological factors.*
- (2) Include a cost-benefit analysis, identifying total benefits and total costs.*
- (3) Include a description of funding available to implement any planned water supply project that would provide water at a higher unit cost.*
- (4) Include a description of the water supplier's legal authority to implement the measure and efforts to work with other relevant agencies to ensure the implementation of the measure and to share the cost of implementation.*

5.2.1 WATER SURVEY PROGRAMS FOR SINGLE-FAMILY AND MULTI-FAMILY RESIDENTIAL CUSTOMERS (10631f (1) (A))

Upper District is a wholesale agency and does not provide water to residential customers. Upper District supplies water only to local retail agencies within its service area that in turn provide water to residential customers. As a wholesale water agency, Upper District cannot implement a water survey program for Single-Family and Multi-Family residential customers. Upper District does, however, encourage its member agencies to implement this DMM.

Chapter 6

WATER SUPPLY OPPORTUNITIES

6.1 WATER USE PROJECTIONS

Section 10631

(k) Urban water suppliers that rely upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier's plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision (c). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (c).

Upper District was requested by Metropolitan to provide its water use projections for the next 20 years. Upper District complied with Metropolitan's request and provided its water use projections from Metropolitan via email. In addition, Upper District received water use projections from its sub-agencies.

6.2 FUTURE WATER SUPPLY PROJECTS

Section 10631

(h) Include a description of all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water uses as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs, other than the demand management programs identified pursuant to paragraph (1) of subdivision (f), that the urban water supplier may implement to increase the amount of water supply available to the urban water supplier in average, single dry, and multiple-dry water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.

Upper District has a reliable source of water supply from Metropolitan. Upper District receives imported supplemental water from Metropolitan and supplies such water to its sub-agencies. Upper District's sub-agencies also have rights to water supplies of the Main Basin. The management structure of the Main Basin ensures a future water supply. Chapter 3, Section 3.2 provides an extensive description of the

Main Basin and provides information on its management. The management structure of the Basin provides a reliability of supply in an average, single-dry and multiple-dry water years. Although Upper District is located in a well-managed groundwater basin, it participates in a variety of programs intended to enhance regional water supply as described below. Upper District does not have information regarding the cost and timeline for each of these programs except those programs that Upper District is directly managing. Additional programs are discussed in Chapter 7.

6.2.1 SURFACE WATER TREATMENT PLANT IMPROVEMENTS

Covina Irrigating Company (CIC) operates a 10-million gallon surface water treatment plant to treat water from the San Gabriel River for domestic uses. Organic material located in the San Gabriel River and in untreated imported water are precursors that, when mixed with chlorine, result in Total Trihalomethanes (TTHM). The federal government has recently adopted new TTHM requirements. Upper District is working with CIC to investigate pretreatment methods to reduce the TTHM precursors, resulting in expanded use of the CIC facility.

6.2.2 PERC III STUDY

In 1992, the first Potential Effective Recharge Capabilities (PERC) study was conducted by Upper District. The PERC I study identified existing spreading facilities in the Main Basin, provided the location of these facilities and determined their recharge capabilities. The PERC I study also reviewed existing sand and gravel quarries as they might relate to additional spreading capacity.

During April 1993, a meeting on optimizing groundwater recharge in the Main Basin was held. Agencies attending that meeting, including Upper District, agreed upon three principles: to optimize use of existing water recharge facilities by coordinating deliveries of local and imported water, to identify future supplemental water requirements, and to identify potential future water recharge facilities needed to meet

future supplemental water requirements. The agencies agreed to help fund for the PERC II study.

In 1995, the PERC II study was completed. PERC II presented a comprehensive overview of water recharge requirements, water recharge capabilities, potential new water conservation facilities and the costs associated with those facilities.

Currently Upper District is preparing a PERC III study, which will focus on the use of gravel quarries as potential groundwater replenishment facilities. The goals of this project are: 1) optimize the use of existing recharge facilities; 2) optimize delivery from existing and local imported water facilities; 3) identify potential new facilities (gravel quarries); 4) identify limits on use of facilities; and 5) identify potential new sources of supply. The PERC III study is estimated to be completed in fiscal year 2005-06. The PERC III study will identify opportunities to increase the recharge capabilities within the Main Basin.

6.2.3 GROUNDWATER CLEANUP

Volatile Organic Compounds (VOCs), primarily Tetrachloroethylene (PCE) and Trichloroethylene (TCE) have been detected above the Maximum Contaminant Level (MCL) of 5 micrograms per liter (ug/l) at wells within Upper District, and are currently inactive. Upper District has set aside funds to assist its sub-agencies with constructing VOC treatment facilities, as needed. Groundwater clean-up within the Main Basin will minimize the need for imported water and improve reliability of the groundwater supply.

6.2.4 RECYCLED WATER

Upper District is involved in the following recycled water projects.

6.2.4.1 GROUNDWATER RECHARGE PROGRAM

The project is an expansion on the Treatment Feasibility Study conducted at SJCWRP in conjunction with a Proposition 50 grant from State Water Resources Control Board. The primary objective of this project is to design a suitable and economically feasible treatment process that removes identified pollutants in SJCWRP effluent to meet both current and future regulations related to groundwater recharge. There are two possible options for this program. One option is to build a 36-inch diameter pipeline, 6.5 miles long, along the eastside of the San Gabriel River, which starts at the SGCWRP and discharges to the San Gabriel River. Ultimately, a maximum of about 10,000 acre-feet of recycled water will be discharged to the San Gabriel River. The second option includes constructing an improved treatment process and building the same size pipeline as discussed.

6.2.4.2 SAN GABRIEL VALLEY WATER RECYCLING DIRECT REUSE PROJECTS

As part of Upper District's continuing effort to augment MWD imported water supply, the San Gabriel Valley Water Recycling Direct Reuse Projects have been developed. All four phases of the Direct Reuse Projects will ultimately supply approximately 13,300 acre-feet of recycled water to irrigation customers in Upper District's service area. Recycled water will be used to replace untreated imported water that has been used for groundwater replenishment, groundwater and treated imported water that has been used for irrigation. The Direct Reuse Projects will be implemented in four phases, as discussed below.

6.2.4.2.1 SAN GABRIEL VALLEY WATER RECYCLING REUSE PROJECT – PHASE I

Recycled water is currently and will be purchased from the Central Basin Municipal, who receives the recycled water from the SJCWRP, which is operated by the County Sanitation Districts of Los Angeles. The recycled water is currently and will be at a discounted recycled water rate to San Gabriel Valley Water Company (SGVWC),

who will sell the recycled water to various customers for landscape irrigation applications. SGVWC will operate the distribution pipeline for Upper District.

The pipeline will supply approximately 1,800 AFY of high-quality recycled water to Mill Elementary School, Rio Hondo College, Rose Hills Cemetery, and a number of smaller users. Upper District has an agreement with Central Basin Municipal to purchase the recycled water and supply it to SGVWC. The volume of water supplied by this project will increase in the future as other recycled water users are connected to the system.

6.2.4.2.2 SAN GABRIEL VALLEY WATER RECYCLING REUSE PROJECT – PHASE IIA

This project expands Upper District's recycled water system to serve several recycled water customers in the South El Monte and Whittier Narrows area. The project will initially supply approximately 4,000 acre feet annually with recycled water from the County Sanitation Districts of Los Angeles County Whittier Narrows Water Reclamation Plant. The facilities for the project include a pump station and approximately 18,000 linear feet of pipeline. The Phase IIA project is presently under construction and will commence operations in spring 2006.

This recycled water system will initially conserve about 4,000 AF of potable water annually by serving the irrigation needs of the Whittier Narrows Recreation Area, an adjacent nursery, a local high school, and some agricultural uses in the area. The project will reduce demand on the potable water supply thereby enhancing the overall regional water supply reliability. It will diminish reliance on imported water, and lessen the amount of water withdrawn from the Sacramento Delta and Colorado River.

6.2.4.2.3 SAN GABRIEL VALLEY WATER RECYCLING REUSE PROJECT – PHASE IIB

The City of Industry Regional Recycled Water Project (CIR Project) is a planned multi-agency recycled water facility expansion. Four water agencies are involved in the CIR Project; the City of Industry, Rowland Water District (RWD), Suburban Water Systems (SWS), and Walnut Valley Water District (WVWD). This regional project includes the construction of new joint and local conveyance, storage, and distribution facilities, providing improved and extended recycled water service to potential customers in South Los Angeles County. SWS and the City of Industry are retail sub-agency members of Upper District.

The facilities for the CIR Project include backbone and local delivery pipelines, booster pumping stations, storage reservoirs, and system appurtenances. The new backbone delivery facilities, including inter-agency pipelines, pump stations, and storage reservoirs, will be constructed by the City of Industry. The local distribution mains, wells, booster pump stations, and several storage tanks will be built by the agencies receiving the water.

6.2.4.2.4 SAN GABRIEL VALLEY WATER RECYCLING REUSE PROJECT – PHASE III

This project will expand the Phase IIA project to future customers, such as a golf course in the City of Pico Rivera, Southern California Edison facilities, CalTrans, and future irrigation customers in the Cities of El Monte, South El Monte, Irwindale, and Arcadia. (A feasibility study identifying potential customers in the City of Arcadia is being prepared.)

The pipeline is estimated at five to six miles in length with in-line booster pump stations and reservoirs to support the recycled water irrigation customer base. The approximate demand of 2,500 AFY of high-quality recycled water is anticipated to be supplied from the Whittier Narrows Water Reclamation Plant, owned and operated by

the County Sanitation Districts of Los Angeles. Upper District will initiate design work on the Phase III project during fiscal year 2005-06 and begin construction on fiscal year 2006-07.

6.3 DESALINATED WATER

Section 10631

- (i) *Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.*

Upper District's sub-agencies produce groundwater from the Main Basin. The groundwater within the Main Basin is high quality groundwater with low Total Dissolved Solids (TDS) concentration; therefore, Upper District has not needed to investigate the potential for desalinated water. In its draft 2005 RUWMP, Metropolitan has considered seawater desalination as a future source of water supply. Information regarding Metropolitan's future use of desalinated water can be found in its draft 2005 RUWMP, which is incorporated by reference. Metropolitan is working with its member agencies in the joint development of research strategies of the role of desalinated water in the region's future water supply.

Chapter 7

URBAN WATER SHORTAGE CONTINGENCY ANALYSIS

7.1 WATER SHORTAGE MANAGEMENT

Section 10632

The plan shall provide an urban water shortage contingency analysis that includes each of the following elements that are within the authority of the urban water supplier.

- (a) Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to 50 percent reduction in water supply, and an outline of specific water supply conditions which are applicable to each stage.*
- (b) An estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency's water supply.*
- (c) Actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.*
- (d) Additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.*
- (e) Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.*
- (f) Penalties or charges for excessive use, where applicable.*
- (g) An analysis of the impacts of each of the actions and conditions described in subdivisions (a) to (f), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.*
- (h) A draft water shortage contingency resolution or ordinance.*
- (i) A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.*

Upper District's Urban Water Shortage Contingency Plan was adopted by the board of directors on March 18, 1992. The Urban Water Shortage Contingency Plan is incorporated in this Plan as reference. A draft of an urban water shortage contingency resolution for Upper District is located in Appendix M. The following sections provide supplemental information regarding Upper District's future water supply during an unexpected problem or shortage and outlines the management structure proposed to meet the water supply requirements during an unforeseen event. Both the programs

and projects described below, and in Chapter 6, collectively help manage Upper District's water supply and may be undertaken to help meet water supply requirements.

Upper District has cooperatively participated in several programs that serve to manage existing water supplies, as described below. These programs have been created to address water supply deficiencies that may arise due to conditions such as drought, failure of water transmission facilities as a result of an earthquake or regional power outage, and contamination of the underlying groundwater basin.

7.2 WATER SHORTAGE ACTIONS

Section 10632

- (a) *Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to 50 percent reduction in water supply, and an outline of specific water supply conditions which are applicable to each stage..*

Upper District is a member agency of Metropolitan and as such relies on Metropolitan for all its imported water supplies. Based on Metropolitan's historic management practices and its stable reliable water supply, Upper District should not experience any long term water supply shortage. According to Metropolitan's draft 2005 RUWMP, their supply is considered to be in surplus as long as net annual deliveries are made to the water storage programs. Metropolitan's supply is considered to be in a shortage condition when Metropolitan must withdraw water from storage to meet demands. Metropolitan has developed a Water Surplus and Drought Management (WSDM) Plan which is discussed further in the following section and is included in Metropolitan's draft 2005 RUWMP, which is incorporated by reference.

7.2.1 WATER SURPLUS AND DROUGHT MANAGEMENT PLAN

The WSDM Plan was adopted in April 1999 as a management tool for planning during wet and dry years. Upper District participated in Metropolitan's WSDM Plan by jointly participating in the development of the plan through various workshops held by Metropolitan. The WSDM Plan addresses regional water management strategies. The WSDM Plan has specific management actions for seven specific water shortage

situations and five surplus situations. The following is a summary of Metropolitan's water shortage stages.

- **Stage 1** – Metropolitan will continue to make deliveries and may need to make withdrawals from Diamond Valley Lake
- **Stage 2** – Metropolitan will continue to make deliveries and in addition to Stage 1 actions, might draw water from groundwater storage in other regions.
- **Stage 3** – Metropolitan may limit the deliveries to the Long-term Seasonal and Replenishment Programs in addition to continuing Stage 2 actions.
- **Stage 4** – Metropolitan will continue to limit its deliveries as explained in Stage 3 and may draw water from conjunctive use groundwater storage and the State Water Project reservoirs.
- **Stage 5** – Metropolitan will continue delivery limitations and draw water from other sources as explained in Stage 4. In addition, Metropolitan will coordinate an effort to increase conservation activities and will monitor the effectiveness of ongoing conservation programs.
- **Stage 6** – Metropolitan will continue Stage 5 actions and in addition may exercise its water supply option contracts or buy water from the open market.
- **Stage 7** – Metropolitan will discontinue its deliveries to regional storage facilities except on a seasonal basis. In addition will implement conservation programs and will develop a plan to efficiently and fairly deliver available water supply to its customers.

Metropolitan expects to be 100 percent reliable at meeting future water supply requirements through its dependable and efficient management of its water supply. Additional information about Metropolitan's WSDM Plan is provided in Metropolitan's draft 2005 RUWMP, which is incorporated by reference.

7.3 PROGRAMS TO MITIGATE WATER SHORTAGES

Since Upper District is dependent on Metropolitan for imported water, Upper District must pass on any reductions in supply from Metropolitan to its sub-agencies. However, Upper District's recycled water, conservation, and long-term cyclic storage increase the reliability and quantity of the local water supply. These programs, which are discussed in detail below, enhance the District's ability to absorb imported water supply shortages and minimize impacts to the region.

7.3.1 RECYCLED WATER STUDY

In addition to providing its sub-agencies with treated and untreated imported water, Upper District also manages a recycled water program. The recycled water program is beneficial to Upper District's member agencies by reducing the use of imported water, which provides economical benefit and enhances the regional water supply reliability. Upper District also is currently involved with an expansion of the Treatment Feasibility Study at the SJCWRP. The primary objective of the feasibility study is to design a treatment process capable of removing compounds from the SJCWRP effluent to meet groundwater replenishment requirements. A more detailed review of Upper District's potential use of reclaimed water is found in Chapter 8 of this Plan.

7.3.2 CYCLIC STORAGE

Upper District, in conjunction with Metropolitan, currently has a Cyclic Storage agreement with Watermaster, which permits the storage of up to 100,000 acre-feet of water. Under this agreement, Upper District is able to make deliveries of imported water to the Basin during periods of surplus water supply. When Upper District is not able to import water for groundwater recharge, water can be transferred from Upper District's cyclic storage account. Additional information about Cyclic Storage is provided in Chapter 3, Section 3.2.2 of this Plan.

7.3.3 LONG-TERM CYCLIC STORAGE

Upper District recently created a Long-term Cyclic Storage Program in December 2003. The Long-term Cyclic Storage program provides an incentive to Upper District's sub-agencies to purchase and store replenishment water for future use, creating reserves for drought protection. During the fiscal year 2003-04, 10,000 acre-feet was purchased by Watermaster and transferred to individual producer Cyclic Storage accounts under the Long-term Cyclic Storage Program. Upper District has made an additional 7,500 acre-feet available to producers during fiscal year 2004-05. Water purchased for the Long-term Cyclic Storage Program must remain stored for periods up to five years. If water levels are over 250 feet, Watermaster is unable to deliver Replacement Water. Therefore, Replacement Water requirements are accomplished through transfers from upper District's Cyclic Storage account to producer Cyclic Storage accounts. Additional information regarding Long-term Cyclic Storage is provided in Chapter 5, Section 5.1.8.2 of this Plan.

7.4 WATER SUPPLY AVAILABILITY

Section 10632

(b) An estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency's water supply.

Metropolitan will be able to continue to deliver all non-discounted and non-interruptible demands through its effective management of its water supply. Table II-4 of Metropolitan's draft May 2005 RUWMP shows Metropolitan's demand and supplies under multiple dry years (Appendix I). Metropolitan expects to meet all demands and supplies under the multiple dry year scenarios. A complete description of Metropolitan's projected water supply is provided in Metropolitan's draft 2005 RUWMP.

7.5 CATASTROPHIC SUPPLY INTERRUPTION

Upper District's sub-agencies receive untreated imported water from Upper District for groundwater recharge and direct use. In the event of a catastrophe including, but not limited to, a power outage or earthquake, Upper District should not

experience a decrease in its water supply. However, in the case there is a reduction; Upper District's sub-agencies can produce the needed water from the Main Basin. Chapter 3 discusses the management and reliability of the Main Basin, which Upper District's sub-agencies can rely on for their primary water supply in case of a catastrophic interruption. Besides the management of the Main Basin, the programs described in Section 7.2 provide additional water supply reliability and management.

7.6 MANDATORY PROHIBITIONS, PENALTIES AND CHARGES

Section 10632

(d) Additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.

(f) Penalties or charges for excessive use, where applicable

As a wholesale water agency, Upper District cannot implement or enforce prohibitions, penalties or charges at the retail level. However, Upper District has passed a resolution to reduce demands within Upper District's service area. Resolution 6-90-266, included as Appendix N, was passed on June 6, 1990. Upper District Resolution 6-90-266 stated, "There is a need to reduce total demands on all water supply entities within the Upper San Gabriel Valley Municipal Water District service area by 10 percent in 1990 as compared to 1989, to reduce the potential for shortages for this year and even more severe shortages next year". This Resolution was passed to reduce demands to mitigate the effects of the 1990 California drought. Upper District continues to urge its customer's to conserve water and promotes water conservation education through its educational programs and public awareness.

Upper District has not developed any penalties or charges for excessive use because Upper District supplies water to retail water agencies on an as needed basis. Upper District's sub-agencies must implement their own penalties and charges for their retail water customers. However, Upper District does pass on Metropolitan's tiered rate structure, which include both Tier 1 and Tier 2 treated water sales. Tiered 1 and Tiered 2 rates are charged to member agencies with elective purchase orders whose demands are less than 90 percent of their historical base period deliveries. For member agencies

without elective purchase orders, Tiered 1 and Tiered 2 rates are charged to those who have demands that are less than 60 percent of their historical base period deliveries. Chapter 5, Section 5.1.9.1 further discusses the Tier 1 and Tier 2 rate schedule.

7.7 CONSUMPTION REDUCTION METHODS

Section 10632

(e) Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.

Upper District is a wholesale water agency and therefore cannot implement or enforce consumption reduction methods at the retail level. However, as stated in Section 7.2, Upper District will pass on any reductions in supply from Metropolitan to its sub-agencies. Metropolitan does not associate stages of action with percent reduction in its WDSM Plan. However, in Metropolitan's WSDM Stage 3, water deliveries for groundwater replenishment to Upper District would be reduced or stopped; which can be quantified by Upper District. Upper District's reduction in groundwater replenishment deliveries would not affect its sub-agencies due to the reliance on the groundwater basin. In the event Metropolitan did not make its replenishment deliveries, Upper District's sub-agencies would rely on groundwater production. As noted in Chapter 3, the Main Basin supply is dependable and a reduction in Upper District's supplies would not be an impact. In addition, at a future date when imported water is made available, the previously curtailed replenishment water would be delivered at that time.

7.8 REVENUE IMPACTS

Section 10632

(g) An analysis of the impacts of each of the actions and conditions described in subdivisions (a) to (f), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments

Upper District generates revenue from several sources including property taxes, a ready-to-serve charge, interest on accumulated funds and surcharges on water sales. In the event of a water shortage, imported water sales may be reduced, which may

impact: 1) revenue generated from surcharges on water sales; and 2) accumulated funds.

In 1995, Upper District passed Resolution 4-95-333, which was amended in 2000 by Resolution 4-00-371, to levy a surcharge on all water sales (see Appendix O). Through these Resolutions, Upper District initiated a program to levy a 5 percent surcharge on all water sales to generate additional revenue. This program has continued and is still maintained today.

Revenue from water sales for Upper District is based on the surcharge for 1) treated direct use and 2) groundwater. The 2003-04 rate for full-service, treated water was \$452.55, of which about \$34.55 is a surcharge. The 2003-04 rate for Replenishment Service water for groundwater replenishment was \$246.65, of which about \$13.65 is a surcharge.

In the event of a shortage of water supply, direct deliveries of treated water could be reduced by 50 percent. During the fiscal year 2003-04, Upper District's treated direct use requirement was about 28,000 acre-feet. If direct deliveries were reduced by 50 percent, Upper District's treated direct use requirement would decrease to about 14,000 acre-feet and it would result in a revenue reduction. Based on the current surcharge rate of \$34.55 per acre-foot for direct deliveries, there would be a loss of revenue of about \$480,000.00

Upper District would experience a loss of revenue if there was a shortage of water supply; however, Upper District's projected demand for direct deliveries for the next 20 years shows a decreasing trend. Future demands on Metropolitan for direct deliveries are assumed to be minimal. Upper District will rely more on groundwater and will decrease its demands for treated imported water.

In the event of a shortage of water supply, Replenishment Service water deliveries could be reduced by up to 100 percent. During the fiscal year 2003-04, Upper District's groundwater replenishment requirement was about 48,000 acre-feet. If deliveries of Replenishment Service water ceased, it would result in a revenue reduction. Based on the current surcharge rate of \$13.65 per acre-foot for Replenishment Service water, there would be a loss of revenue of about \$655,200.00 for that year. However, the Replenishment Service Water continuously has periods of filling and drafting and the revenue from this program will eventually be received.

In fiscal year 2003-04, Upper District's total water revenues were about \$13,600,000.00; which is about 58 percent of the total revenues (\$23,600,000.00) during fiscal year 2003-04. If revenue from water sales was reduced by 100 percent, Upper District would face a reduction in its total revenue of about 58 percent. Upper District would be faced with the necessity to utilize operating reserve funds and/or capital reserve funds to cover fixed operating expenses until normal operating revenues could be reestablished. Significant reductions in District operating and non-operating reserves could postpone or otherwise impact established water supply project and program schedules. Additionally, reestablishment of reduced reserve fund levels could require an increase in the District's schedule of rates and charges.

7.9 DETERMINATION OF REDUCTIONS IN WATER USE

Section 10632

- (i) A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.*

Upper District has the ability to monitor water use within its boundaries. Upper District keeps track of local water and imported water use. Such data are then used to determine annual fluctuations in water use. Upper District can compare total water use from one year to the next to determine actual reductions in water use. Because the Basin is so reliant upon groundwater supplies, the determination of actual reductions in water use include groundwater production.

Chapter 8

RECYCLED WATER

Section 10633

The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area, and shall include all of the following:

8.1 BACKGROUND

Upper District currently delivers recycled water to its sub-agencies for direct (irrigation) use only. The use of recycled water for groundwater recharge is proposed to be studied further. Upper District is in the process of expanding its recycled water system to increase deliveries to its sub-agencies. The current project will more than double the District's recycled water delivery capacity when complete early in 2006. Also, Upper District, in conjunction with San Gabriel Valley Municipal Water District, is participating in a Master Plan study with Central Basin Municipal for the expansion of a regional recycled water distribution system. A Memorandum of Understanding regarding the coordination for the Master Plan is located in Appendix P.

8.2 WASTEWATER COLLECTION AND TREATMENT SYSTEMS

Section 10633

(a) A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.

Reclamation of wastewater in the Main Basin has been extensively reviewed in both local and regional studies. In 1976 Upper District and San Gabriel District completed a study entitled "Potential Use of Reclaimed Water for Groundwater Replenishment in the Basin." This study was updated at the request of the Basin Watermaster in 1980 and again in March 1987. In 1979, a cooperative study was completed by Metropolitan and others entitled "Orange and Los Angeles Counties

Water Reuse Study.” These studies concluded that water reuse in the Basin could be feasible; however, the cost of utilizing recycled water varies widely with the quantity to be used and the distance required to transport the water from the treatment plant to the point of use.

There are two water reclamation plants in the Basin; Whittier Narrows Water Reclamation Plant and San Jose Creek Water Reclamation Plant. Sanitation District of Los Angeles County operates both of these facilities. The location of these reclamation plants are shown on Plate 5. For both reclamation plants, the balance of effluent is discharged to the San Gabriel River and eventually flows to the ocean.

The WNWRP, which began operation in 1962, was the first reclamation plant built by the CSD. It has a treatment capacity of about 15 million gallons per day (MGD) and provides coagulated, filtered and disinfected tertiary effluent. The WNWRP serves a population of approximately 150,000 people. During the fiscal year 2003-04, the total water production from this plant was about 8,380 AF.

The SJCWRP, which began operation in 1973, currently has a treatment capacity of about 100 MGD and provides coagulated, filtered and disinfected tertiary effluent. The SJCWRP has room for an expansion of an additional 25 MGD, which has an anticipated completion date in 2006. The SJCWRP plant serves a population of approximately 1 million people, largely a residential population. During fiscal year 2003-04, the total water production from this plant was about 92,000 AF.

8.3 RECYCLED WATER USE

Section 10633

(b) A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.

Recycled water use within Upper District's service area from the WNWRP, is used by F.L. Norman's Nursery. During fiscal year 2003-04, 65 AF of recycled water produced from WNWRP was used within Upper District by F.L. Norman's Nursery.

Currently there are no other users of recycled water within Upper District that receive water from WNWRP. However, the current Upper District project will utilize recycled water from the WNWRP to supply the Whittier Narrows Regional Park, Whittier Narrows Golf Course and South El Monte High School beginning in calendar year 2006.

Recycled water use during fiscal year 2003-04 within Upper District's service area from the SJCWR was accomplished at the City of Industry, the California Country Club, Arbor Nursery, Puente Hills Landfill, Puente Hills Energy Recovery from Landfill Gas (PERG) Facility, and Rose Hills Memorial Park.

The City of Industry began to use recycled water in 1983 and currently uses such water for landscape irrigation at golf courses, an equestrian center and at ornamental lakes. During fiscal year 2003-04, the City of Industry used 1,103 AF of recycled water. The California Country Club irrigates a 120-acre golf course and during fiscal year 2003-04, 452 AF of recycled water was used. The Arbor Nursery used 2 AF of recycled water to irrigate ornamental plants at its five-acre site during fiscal year 2003-04. Puente Hills Landfill and the PERG Facility began receiving recycled water in November 1997. During fiscal year 2003-04, Puente Hills Landfill used 800 AF of recycled water for landscape irrigation and dust control. The PERG Facility used 563 AF of recycled water for cooling tower supply during fiscal year 2003-04. Rose Hills Memorial Park used 449 AF of recycled water for landscape irrigation during fiscal year 2003-04. J&M Farming began receiving recycled water in September 2000. J&M Farming used 4 AF of recycled water during fiscal year 2003-04. Mill Elementary School and Rio Hondo College both started receiving recycled water in June 2003. During the 2003-04 fiscal year, Mill Elementary School used 8 AF of recycled water and Rio Hondo College used 27 AF of recycled water. A summary of the historic recycled water use within Upper District's service area is shown on Table 9.

Other uses of recycled water include the portion of recycled water used to fulfill the Upper Area's Make-up Water obligation to the Lower Area under the terms of the

Long Beach Judgment. When the Lower Area does not receive its full quantity of entitlement water, the Long Beach Judgment allows the Upper Area to reimburse the Lower Area for its cost of recycled water and such reimbursement is credited as a delivery of Make-up Water requirement with a maximum allowable amount of 14,735 AF. If the quantity exceeds 14,735 AF, imported water must be purchased.

8.4 POTENTIAL USES OF RECYCLED WATER

Section 10633

(c) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.

The Sanitation Districts of Los Angeles County released a Health Effects Study in 1984. The Study recommended that the amount of recycled water allowed for groundwater recharge be increased. As a result, there was an increase in the use of recycled water for groundwater replenishment purposes and future use options are still being considered. In the 1990s, Metropolitan along with the United States Bureau of Reclamation, California Department of Water Resources and Metropolitan member agencies conducted a feasibility study of regional water reclamation. Metropolitan and its member agencies continue to participate in regional planning to explore recycled water projects and plans.

During the calendar year 1994, Upper District participated in a study to determine potential direct users of recycled water. In October 1994, a draft report of the study entitled, "Direct Reuse Study" was released, which identified the potential for recycled water use within the Main San Gabriel Basin. A copy of the draft study is available at the Upper District office and is included by reference.

The Direct Reuse Study identified over 600 potential recycled water users within the San Gabriel Valley consisting of schools, parks, golf courses, nurseries, sand and gravel companies and cemeteries. These direct users of recycled water would be

served by their retail agencies. A summary of the potential recycled water users within the Main Basin are shown on Table 10.

8.5 PROJECTED USE OF RECYCLED WATER

Section 10633

(d) The projected use of recycled water within the supplier's service area at the end of 5, 10, 15 and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.

Upper District is developing a project that proposes the use of up to 10,000 AF per year of recycled water for recharge downstream of the Santa Fe Dam along the San Gabriel River. The projected use of recycled water for the next 20 years for groundwater replenishment is uncertain until a plan is developed. In addition to using recycled water for groundwater replenishment, Upper District is developing plans for the direct use of recycled water for irrigation. Table 11 provides an estimation of the projected water use by Upper District and their retail purveyors at the end of 5, 10, 15 and 20 years.

8.6 FUTURE PLANS FOR RECYCLED WATER

Section 10633

- (e) A description of actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.*
- (f) A plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.*

Upper District is currently involved in the San Gabriel Valley Water Recycling Direct Reuse Project. This direct reuse project is part of Upper District's effort to reduce reliance on an imported water supply, provide an economic benefit as well as enhancing local water supply reliability. The Phase I of Upper District's direct reuse recycled water program is in operation and Phase IIA is under construction. In addition to the direct reuse project, Upper District is also involved in an expansion of the Treatment Feasibility Study at the SJCWRP called the Groundwater Recharge Program. This study includes a project to design a treatment process capable of improving the quality

from the SJCWRP effluent to meet both current and future groundwater replenishment requirements. The following sections provide information regarding the San Gabriel Valley Water Recycling Direct Reuse Project and the Groundwater Recharge Program. Table 12 summarizes the potential users of recycled water within Upper District as a result of the San Gabriel Valley Recycling Direct Reuse Project.

8.6.1 SAN GABRIEL VALLEY WATER RECYCLING DIRECT REUSE PROJECTS

Upper District's direct reuse recycled water project includes four phases, which will ultimately supply about 13,300 AF of recycled water to customers within Upper District's service area. Recycled water will replace imported water that is currently used for irrigation. The Direct Reuse Project will be implemented in four phases, as discussed below.

8.6.1.1 PHASE I

Recycled water from the SJCWRP, which is operated by the County Sanitation Districts of Los Angeles, is currently supplied to San Gabriel Valley Water Company (SGVWC) at a discounted recycled water rate. SGVWC serves the recycled water to various customers for landscape irrigation.. The pipeline is supplying approximately 1,800 AF per year of high-quality recycled water to Mill Elementary School, Rio Hondo College, Rose Hills Cemetery and a number of smaller users. The volume of water supplied by this project will increase in the future as other recycled water users are connected to the system.

8.6.1.2 PHASE IIA

Phase IIA will expand Upper District's recycled water system by providing service to customers in the South El Monte and Whittier Narrows area. Phase IIA will initially be able to supply approximately 4,000 AF annually of recycled water from the County Sanitation Districts of Los Angeles County Whittier Narrows Water Reclamation Plant. Phase IIA will also conserve about 4,000 AF of potable water annually by serving

irrigation needs of Whittier Narrows Recreation Area, an adjacent nursery, a local high school, both an existing and a new golf course and some agricultural uses in the area, reducing the demand on groundwater and imported water supply. Phase IIA will decrease the reliance on imported water and reduce the amount of water withdrawn from the Sacramento Delta and Colorado River. The facilities for Phase IIA include a pump station and about 18,000 linear feet of pipeline.

8.6.1.3 PHASE IIB

Phase IIB includes the City of Industry Regional Recycled Water Project. The Regional Recycled Water Project is a planned multi-agency recycled water facility expansion including the City of Industry, Rowland Water District, Suburban Water Systems and the Walnut Valley Water District as well as Upper District. Phase IIB includes the construction of new joint and local conveyance, storage, and distribution facilities, providing improved and extended recycled water service to potential customers in South Los Angeles County. Suburban Water Systems and the City of Industry are both sub-agency members of Upper District.

The facilities for Phase IIB include backbone and local delivery pipelines, booster pumping stations, storage reservoirs and system appurtenances. The new backbone delivery facilities, including inter-agency pipelines, pump stations and storage tanks will be constructed cooperatively by the participating agencies. The local distribution mains, booster pump stations, and several storage tanks will be built as components of this project.

8.6.1.4 PHASE III

Phase III will expand Phase IIA to future customers, such as Southern California Edison facilities, CalTrans, and future irrigation customers in the Cities of El Monte, South El Monte, Irwindale, and potentially Arcadia. The facilities for Phase III are a five to six mile long pipeline with in-line booster pump stations and reservoirs. The

approximate demand of 2,500 AF per year of high-quality water is anticipated to be supplied from the Whittier Narrows Water Reclamation Plant.

8.6.2 GROUNDWATER RECHARGE PROGRAM

The Groundwater Recharge Program is an expansion to the treatment Feasibility Study conducted at SJWRP. The objective of this program is to design a suitable and economically feasible treatment process that removes identified pollutants in the SJCWRP effluent to meet both current and future regulations related to groundwater recharge.

8.6.3 RECYCLED WATER SALES

All four phases of the Direct Reuse project will ultimately supply approximately 13,300 AF of recycled water to irrigation customers in Upper District's service area. In addition, Upper District is investigating the option of using recycled water to supplant untreated imported water, for groundwater recharge. Upper District's current recycled water rates vary from \$160/AF to \$195/AF depending upon Upper District's actual cost of delivery to the end user. The recycled water rates are established through long-term contracts with the participating retail agency. The rates are set to create an economic incentive to maximize the use of recycled water for irrigation applications, while reducing demand on potable supplies, for irrigation applications.

Chapter 9

WATER QUALITY

Section 10634

The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.

9.1 WATER QUALITY SUMMARY

The water supply to Upper District's sub-agencies meets all state and federal water quality standards. The potable water supply within Upper District comes from two main sources: the Main Basin and Metropolitan. Water produced within the Main Basin historically had been impacted by man-made contaminants in certain areas and at varying depths. If the groundwater quality of the Main Basin suffers from the man-made contaminants which pose a threat to water quality, Upper District's sub-agencies can rely more on treated imported water. In addition, Upper District and its sub-agencies have treatment facilities to treat the contaminated groundwater.

Water from Metropolitan is delivered by Upper District to its sub-agencies within its service area for direct use and groundwater recharge. Metropolitan's water quality meets all state and federal water quality standards. Water quality plays a vital role in Metropolitan's availability of a useful water supply. Water quality affects the reliability of groundwater storage, recycled water and impacts the CALFED Bay-Delta. Metropolitan has participated and continues to implement planning efforts to increase water quality. Metropolitan's efforts are explained in its draft 2005 RUWMP, which is incorporated by reference.

Chapter 10

WATER SUPPLY RELIABILITY

Section 10635

(a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry year water year, and multiple dry water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

10.1 RELIABILITY OF UPPER DISTRICT'S WATER SUPPLY

Upper District's service area has a highly reliable water supply from: 1) Metropolitan imported water supply; and 2) the sub-agencies dependency on the Main Basin groundwater and recycled water from LACSD. Upper District is a wholesale agency that supplies imported supplemental water from Metropolitan and recycled water to its sub-agencies. The projected future demands for Upper District are discussed in Chapter 4. Metropolitan has concluded that it has a reliable source of water to supply to its member agencies for the next 20 years. The draft 2005 RUWMP prepared by Metropolitan, which is incorporated by reference, should be referred to for more details on the reliability of Metropolitan's imported water supplies.

In addition, Upper District's sub-agencies produce water from the Main Basin. The amount of basin recharge affects the elevation of the Key Well, which represents changes in the groundwater basin. As shown on Figure 2, the Main Basin historically goes through phases of drafting, which are followed by filling. As noted in Chapter 3, the Main Basin is a well-managed groundwater basin and

can ensure long-term reliability of water supply. Additional information on the reliability of the groundwater basin and the elevation of the Key Well is discussed in Chapter 3.

TABLE 1**HISTORIC SOURCES OF WATER SUPPLY
AVAILABLE TO METROPOLITAN**

CALENDAR YEAR	LOCAL SUPPLIES	L.A. AQUEDUCT	COLORADO RIVER AQUEDUCT ¹	STATE WATER PROJECT²	TOTALS
1995	1,623,271	464,102	936,097	451,305	3,474,775
1996	1,749,198	424,994	1,092,089	642,871	3,909,152
1997	1,745,964	435,786	1,128,145	724,393	4,034,288
1998	1,725,420	466,836	943,841	521,255	3,657,352
1999	1,924,759	309,038	1,124,624	790,538	4,148,959
2000	1,740,274	255,183	1,230,700	1,442,615	4,668,772
2001	1,521,231	266,923	1,252,870	1,119,408	4,160,432
2002	1,983,920	179,338	959,248	1,413,745	4,536,251
2003	1,428,371	251,942	649,491	1,560,569	3,890,373
2004	1,667,660	202,547	697,478	1,792,246	4,359,931

1. Total Colorado River Aqueduct deliveries less Desert Water Agency and Coachella Valley Water Agency
2. Entitlement, Exchanges, Wheeling, Carryover, Drought Bank, etc.

(The Metropolitan Water District of Southern California Regional Urban Water Management Plan, May 2005)

TABLE 2
HISTORIC ANNUAL RAINFALL IN THE SAN GABRIEL VALLEY
FROM 1958-59 THROUGH 2003-2004*

WATER YEAR	RAINFALL IN INCHES
1958-59	8.5
1959-60	10.6
1960-61	5.9
1961-62	22.4
1962-63	12.3
1963-64	9.4
1964-65	15.2
1965-66	19.6
1966-67	25.0
1967-68	15.0
1968-69	30.5
1969-70	11.1
1970-71	13.3
1971-72	8.5
1972-73	22.4
1973-74	16.8
1974-75	14.9
1975-76	12.1
1976-77	14.5
1977-78	38.4
1978-79	23.9
1979-80	34.8
1980-81	10.3
1981-82	18.9
1982-83	39.3
1983-84	10.6
1984-85	14.6
1985-86	22.0
1986-87	9.1
1987-88	14.9
1988-89	11.2
1989-90	12.4
1990-91	15.1
1991-92	22.8
1992-93	35.9
1993-94	11.6
1994-95	30.4
1995-96	15.6
1996-97	17.5
1997-98	36.1
1998-99	8.6
1999-00	14.4
2000-01	15.5
2001-02	6.4
2002-03	19.4
2003-04	12.7
TOTAL	810.4
46-YEAR AVERAGE	17.6

*Annual rainfall determined as the average of rainfall at San Dimas (station 95), Pomona[†] (station 356C), El Monte (station 108D), and Pasadena (station 610B).

[†]Pomona (station 356C) replaced Walnut (station 102D) in 2000-01.

TABLE 3

HISTORIC UPPER DISTRICT
WATER SALES BY CATEGORY OF USE
FISCAL YEAR 1973-74 THROUGH 2003-2004
(Acre-feet)

<u>Fiscal Year</u>	<u>Direct Use</u>	<u>Replenishment 1/</u>	<u>Make-up</u>	<u>Recycled Water 2/</u>	<u>Totals</u>
1973-74	183.9	0.0	0.0	--	183.9
1974-75	255.4	13,731.9	0.0	--	13,987.3
1975-76	226.6	7,121.4	0.0	--	7,348.0
1976-77	675.8	13,407.5	14,510.8	--	28,594.1
1977-78	1,712.5	43,291.2	0.0	--	45,003.7
1978-79	2,114.0	27,486.1	0.0	--	29,600.1
1979-80	2,939.4	7,931.6	7,750.0	--	18,621.0
1980-81	4,379.8	3,130.7	32,650.0	--	40,160.5
1981-82	3,971.7	43,678.4	18,325.0	--	65,975.1
1982-83	5,026.6	25,190.7	8,600.0	--	38,817.3
1983-84	6,369.8	1,907.1	13,255.0	--	21,531.9
1984-85	7,629.7	2,395.5	0.0	--	10,025.2
1985-86	7,619.5	5,600.8	0.0	--	13,220.3
1986-87	7,947.7	33,129.9	0.0	--	41,077.6
1987-88	9,567.4	41,564.0	4,599.0	--	55,730.4
1988-89	8,366.7	42,796.6	5,077.0	--	56,240.3
1989-90	12,252.9	48,054.1	11,082.0	--	71,389.0
1990-91	10,536.3	75,722.3	100.0	--	86,358.6
1991-92	7,246.8	62,164.4	0.0	--	69,411.2
1992-93	6,991.1	47,687.4	0.0	--	54,678.5
1993-94	4,421.1	30,025.2	0.0	--	34,446.3
1994-95	4,218.6	9,355.3	0.0	--	13,573.9
1995-96	3,667.1	18,702.9	0.0	--	22,370.0
1996-97	3,620.1	53,523.1	0.0	--	43,088.6
1997-98	4,011.4	63,673.5	0.0	--	53,683.9
1998-99	3,777.8	17,147.5	0.0	--	7,131.2
1999-00	7,642.8	17,153.9	0.0	--	24,796.7
2000-01	5,784.9	20,298.3	0.0	--	19,483.0
2001-02	14,907.2	28,671.2	0.0	--	43,578.4
2002-03	17,668.2	36,569.7	0.0	--	54,237.9
2003-04	24,616.2	27,224.5	0.0	122	41,962.7

1/ Includes purchases from Cyclic Storage and direct deliveries of treated water to the City of Alhambra because it is considered to be replenishment water under the terms of the Cooperative Water Exchange Agreement (CWEA).

2/ Recycled Water Sales by Upper District began in fiscal year 2003-04. In addition to this sale, other water agencies within Upper District have historically used Recycled Water, as shown on Table 6.

TABLE 4**SERVICE CONNECTION INFORMATION WITHIN UPPER DISTRICT'S SERVICE AREA**

Connection Number	User	Maximum Capacity (cfs)	Metropolitan Service Feeder	Treated (T) / Untreated (U)	Use
USG-1T*	Valley County Water District	7	Middle	T	Domestic
USG-01	Southern California Water Company	7.5	Middle	T	Domestic
USG-02	City of South Pasadena	10	Palos Verdes	T	Domestic
USG-03	Upper District	400	Foothill	U	Replenishment
USG-04	Suburban Water System	20	Middle	T	Domestic
USG-05	City of Alhambra	7.5	Cross	T	Domestic
USG-06	City of Arcadia	20	Upper	T	Domestic
USG-07	City of Monrovia	40	Upper	T	Domestic
USG-08	Azusa Valley Water Company	7.5	Middle	T	Domestic
USG-09	Valley County Water District	30	Middle	T	Domestic

*Temporary Connections

TABLE 5

HISTORIC UPPER DISTRICT WATER DELIVERIES BY SERVICE CONNECTION
FISCAL YEAR 1973-74 THROUGH 2003-2004
(Acre-feet)

Fiscal Year*	DIRECT DELIVERIES									REPLACEMENT WATER USG-SGP CENB-48 USG-3 1/	MAKE-UP WATER CENB-36 CENB-28 CENB-48 2/
	USG-IT	USG-1	USG-2	USG-4	USG-5	USG-6	USG-7	USG-8	USG-9		
1973-74	--	174.7	9.9	0.0	0.0	0.0	0.0	0.0	--	0.0	0.0
1974-75	--	255.4	0.0	0.0	0.0	0.0	0.0	0.0	--	13,731.9	0.0
1975-76	--	185.8	6.0	34.8	0.0	0.0	0.0	0.0	--	7,121.4	0.0
1976-77	--	175.5	5.6	494.7	2,654.9	0.0	0.0	0.0	--	10,752.6	14,510.8
1977-78	--	26.6	21.8	1,663.5	2,981.7	0.6	0.0	0.0	--	27,636.0	0.0
1978-79	--	394.6	2.1	1,717.3	3,486.1	0.0	0.0	0.0	--	24,000.0	0.0
1979-80	--	380.2	3.4	2,555.8	3,191.0	0.0	0.0	0.0	--	4,740.6	7,750.0
1980-81	--	120.9	1.6	4,064.6	3,130.7	192.7	0.0	0.0	--	0.0	32,650.0
1981-82	--	45.9	0.0	3,925.3	2,853.7	0.0	0.5	0.0	--	40,824.7	18,325.0
1982-83	436.6	36.5	0.0	4,523.0	2,256.3	0.0	1.0	29.5	--	22,934.4	8,600.0
1983-84	0.0	20.8	0.0	6,010.9	1,907.1	0.0	5.4	332.7	--	0.0	13,255.0
1984-85	238.2	73.1	0.0	6,264.6	2,395.5	0.0	4.7	1,049.1	--	0.0	0.0
1985-86	0.0	309.2	0.0	6,519.3	2,600.8	0.0	10.4	780.6	--	3,000.0	0.0
1986-87	58.7	99.6	0.0	7,057.9	2,484.2	0.0	3.3	728.2	--	25,000.0	0.0
1987-88	267.7	59.1	0.0	7,752.0	3,751.3	0.0	5.9	1,482.7	--	33,000.0	4,599.0
1988-89	132.0	83.1	0.0	7,620.3	3,726.6	0.0	171.2	360.1	--	39,070.0	5,077.0
1989-90	2,021.5	40.3	131.8	9,484.6	1,716.1	0.0	261.8	312.9	--	32,740.2	11,082.0
1990-91	1,376.1	40.2	0.0	7,762.2	2,734.1	631.7	81.7	764.7	--	43,664.8	100.0
1991-92	1,161.1	0.0	0.0	9,093.1	2,214.0	0.0	2.0	151.7	--	35,484.8	0.0
1992-93	0.0	0.0	0.0	6,989.4	3,214.0	0.0	0.0	1.7	--	44,473.4	0.0
1993-94	0.0	1.6	0.0	4,418.0	3,214.0	0.0	0.0	1.5	--	23,050.8	0.0
1994-95	0.0	3.5	99.8	4,115.1	3,178.1	0.0	0.3	0.0	--	6,177.2	0.0
1995-96	0.0	3.5	243.7	3,336.7	3,149.9	0.0	0.0	83.2	--	15,553.0	0.0
1996-97	0.0	7.1	115.1	3,419.2	3,304.5	0.0	0.0	78.7	0.0	36,164.0	0.0
1997-98	0.0	79.9	253.8	3,645.4	3,392.7	0.0	0.0	32.3	0.0	46,279.8	0.0
1998-99	0.0	14.0	444.5	3,147.4	3,353.4	0.0	0.0	171.9	0.0	0.0	0.0
1999-00	0.0	36.5	2,160.5	5,432.9	3,508.3	0.0	0.0	12.9	0.0	13,645.6	0.0
2000-01	0.0	182.0	550.2	5,048.8	3,285.3	0.0	3.9	0.0	0.0	10,412.8	0.0
2001-02	0.0	225.9	3,097.6	11,434.8	3,438.9	0.0	0.0	148.9	0.0	25,232.3	0.0
2002-03	0.0	391.9	607.5	14,038.7	3,018.3	0.0	0.1	2,100.3	529.7	33,551.4	0.0
2003-04	0.0	1,040.3	123.9	12,822.0	3,058.3	540.5	0.0	1,975.1	8,114.4	14,166.2	0.0

*July 1 through June 30.

1/ Deliveries of untreated Replacement Water.

2/ Deliveries of untreated Make-up Water.

TABLE 6

HISTORIC WATER PRODUCTION, IMPORTED WATER SUPPLY, AND RECYCLED
WATER USE WITHIN UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT
FISCAL YEAR 1973-74 THROUGH 2003-04
(ACRE-FEET)

1. Fiscal Year	2. Water Production	3. Imported Water Supply			4. Recycled Water Use	5. (2+3a+4) Total Water Use
		(a) Direct Use	(b) Replenishment and Replacement	(c) Total Imported		
1973-74	207,535	184	0	184	--	207,719
1974-75	197,056	255	13,732	13,987	--	197,311
1975-76	211,734	227	7,121	7,348	--	211,961
1976-77	185,567	676	13,408	14,084	--	186,243
1977-78	172,715	1,713	43,291	45,004	--	174,428
1978-79	190,441	2,114	27,486	29,600	--	192,555
1979-80	197,277	2,939	7,932	10,871	--	200,216
1980-81	205,185	4,380	3,131	7,511	--	209,565
1981-82	195,089	3,972	43,678	47,650	--	199,061
1982-83	184,782	5,027	25,191	30,218	--	189,809
1983-84	208,767	6,370	1,907	8,277	--	215,137
1984-85	214,734	7,630	2,396	10,026	--	222,364
1985-86	218,799	7,620	5,601	13,221	--	226,419
1986-87	225,114	7,948	33,130	41,078	--	233,062
1987-88	221,539	9,567	41,564	51,131	--	231,106
1988-89	225,124	8,367	42,797	51,164	--	233,491
1989-90	219,462	12,253	48,054	60,307	--	231,715
1990-91	204,420	10,536	75,722	86,258	1,522	216,478
1991-92	196,055	7,247	62,164	69,411	1,442	204,744
1992-93	207,807	6,991	47,687	54,678	1,423	216,221
1993-94	204,819	4,421	30,025	34,446	1,362	210,602
1994-95	216,408	4,219	9,355	13,574	1,326	221,953
1995-96	235,841	3,667	18,703	49,411	1,549	241,057
1996-97	244,960	3,620	53,523	72,280	1,688	250,268
1997-98	222,348	4,011	63,674	77,095	1,926	228,285
1998-99	230,601	3,778	17,148	26,903	3,390	237,769
1999-00	215,485	7,643	17,154	24,797	3,627	226,755
2000-01	210,601	5,785	20,298	26,083	3,154	219,540
2001-02	211,804	14,907	28,671	43,578	3,448	230,159
2002-03	192,003	17,668	36,570	54,238	3,225	212,896
2003-04	206,099	24,616	27,225	51,841	3,919	234,634

TABLE 7

HISTORIC METROPOLITAN/UPPER DISTRICT
CYCLIC STORAGE ACCOUNT
(ACRE-FEET)

Fiscal Year	Cyclic Storage Deliveries	Cyclic Storage Withdrawal	Accumulated Balance
1975-76	12,621.10	0.00	12,621.10
1976-77	52.40	0.00	12,673.50
1977-78	0.00	12,673.50	0.00
1978-79	0.00	0.00	0.00
1979-80	0.00	0.00	0.00
1980-81	0.00	0.00	0.00
1981-82	0.00	0.00	0.00
1982-83	3,189.30	0.00	3,189.30
1983-84	3,246.70	0.00	4,862.40
1984-85	0.00	0.00	4,862.40
1985-86	47,405.40	0.00	52,267.80
1986-87	23,991.10	5,645.70	70,613.20
1987-88	5,975.00	4,812.70	71,775.50
1988-89	110.70	0.00	71,886.20
1989-90	0.00	13,597.80	58,288.40
1990-91	14,453.50	29,323.40	43,418.50
1991-92	23,525.90	24,465.60	13,667.80
1992-93	10,214.60	0.00	12,646.20
1993-94	0.00	3,760.42	8,564.20
1994-95	6,177.10	0.00	14,741.30
1995-96	85.20	0.00	14,826.50
1996-97	32,229.90	14,054.60	33,001.80
1997-98	24,870.20	14,001.00	43,871.00
1998-99	0.00	13,794.10	30,076.90
1999-00	24,416.20	0.00	54,493.10
2000-01	14,624.30	6,600.20	62,517.20
2001-02	1,944.90	0.00	64,462.10
2002-03	0.00	0.00	64,462.10
2003-04	13,403.00	10,000.00	78,065.10

TABLE 8

PROJECTED WATER PRODUCTION, IMPORTED WATER SUPPLY, AND RECYCLED
WATER USE WITHIN SAN GABRIEL MUNICIPAL WATER DISTRICT
FISCAL YEAR 1973-74 THROUGH 2003-04
(ACRE-FEET)

1. Fiscal Year	2. Water Production	3. Imported Water Supply			4. Recycled Water Use	5. (2+3a+4) Total Water Use
		(a) Direct Use	(b) Replenishment and Replacement	(c) Total Imported		
2004-05	216,896	16,000	32,000	48,000	4,577	237,473
2005-06	219,855	14,200	34,000	48,200	5,235	239,290
2006-07	222,815	12,400	36,000	48,400	6,035	241,250
2007-08	225,775	10,600	38,000	48,600	6,835	243,210
2008-09	228,745	8,800	40,000	48,800	7,635	245,180
2009-10	231,694	7,000	42,000	49,000	8,435	247,129
2010-11	233,654	6,200	43,200	49,400	9,235	249,089
2011-12	235,614	5,400	44,400	49,800	11,008	252,022
2012-13	237,573	4,600	45,600	50,200	12,782	254,955
2013-14	239,533	3,800	46,800	50,600	14,555	257,888
2014-15	241,493	3,000	48,000	51,000	16,329	260,822
2015-16	242,652	3,000	49,200	52,200	18,102	263,754
2016-17	243,812	3,000	50,400	53,400	18,602	265,414
2017-18	244,972	3,000	51,600	54,600	19,102	267,074
2018-19	246,132	3,000	52,800	55,800	19,602	268,734
2019-20	247,291	3,000	54,000	57,000	20,102	270,393
2020-21	248,451	3,000	55,600	58,600	20,602	272,053
2021-22	249,611	3,000	57,200	60,200	21,102	273,713
2022-23	250,770	3,000	58,800	61,800	21,602	275,372
2023-24	251,931	3,000	60,400	63,400	22,102	277,033
2024-25	253,090	3,000	62,000	65,000	22,602	278,692
2025-26	254,250	3,000	63,600	66,600	23,102	280,352

Table 9

HISTORIC RECYCLED WATER USE WITHIN
UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT
(Acre-feet)

FISCAL YEAR	NORMAN'S NURSERY	CITY OF INDUSTRY	CALIFORNIA COUNTRY CLUB	ARBOR NURSERY	PUENTE HILLS LANDFILL	PERG FACILITY ¹	ROSE HILLS MEMORIAL PARK	J&M FARMING	MILL ELEMENTARY SCHOOL	RIO HONDO COLLEGE	TOTAL
1990-91	41	1,082	390	9	--	--	--	--	--	--	1,522
1991-92	39	1,009	386	8	--	--	--	--	--	--	1,442
1992-93	37	994	380	12	--	--	--	--	--	--	1,423
1993-94	39	927	387	9	--	--	--	--	--	--	1,362
1994-95	42	912	365	7	--	--	--	--	--	--	1,326
1995-96	53	1,048	439	9	--	--	--	--	--	--	1,549
1996-97	48	1,139	489	12	--	--	--	--	--	--	1,688
1997-98	52	835	394	14	259 ²	355 ²	17 ³	--	--	--	1,926
1998-99	67	969	392	14	946	656	346	--	--	--	3,390
1999-00	86	919	463	14	1,193	544	408	--	--	--	3,627
2000-01	77	824	430	14	742	624	338	105 ⁴	--	--	3,154
2001-02	72	1,023	422	18	908	586	275	144	--	--	3,448
2002-03	66	923	389	17	815	498	334	179	1 ⁵	3 ⁵	3,225
2003-04	65	1,103	452	2	1,063	563	449	187	8	27	3,919

1. Puente Hills Energy Recovery from Landfill Gas (PERG) Facility
2. Recycled Water Use for November 1997 - June 1998
3. Recycled Water Use for June 1998
4. Recycled Water Use for September 2000 - June 2001
5. Recycled Water Use for June 2003

Table 10

SUMMARY OF POTENTIAL RECLAIMED WATER USERS

<u>TYPE OF WATER USER</u>	<u>NUMBER OF USERS</u>	(Acre-feet/Year)
		<u>VOLUME OF RECLAIMED WATER</u>
Industrial	50	6,372
Nurseries & Cemeteries	35	4,715
Schools	306	3,018
Golf Courses	14	2,923
Parks	96	1,930
Commercial Irrigation	29	815
Freeway Landscape	25	628
Street Medians	54	283
<u>TOTAL</u>	609	20,684

Source: Draft Direct Use Study, 1994, Table 3-1.

Table 11

PROJECTED RECYCLED WATER USE
(In Acre-feet per Year)

FISCAL YEAR	REPLENISHMENT	DIRECT USE	TOTAL
2005-06	0	5,235	5,235
2010-11	0	9,235	9,235
2015-16	0	18,102	18,102
2020-21	0	20,602	20,602
2025-26	0	23,102	23,102

TABLE 12
POTENTIAL USERS OF RECYCLED WATER FROM
SAN GABRIEL VALLEY WATER RECYCLING DIRECT REUSE PROJECT
(ACRE-FEET)

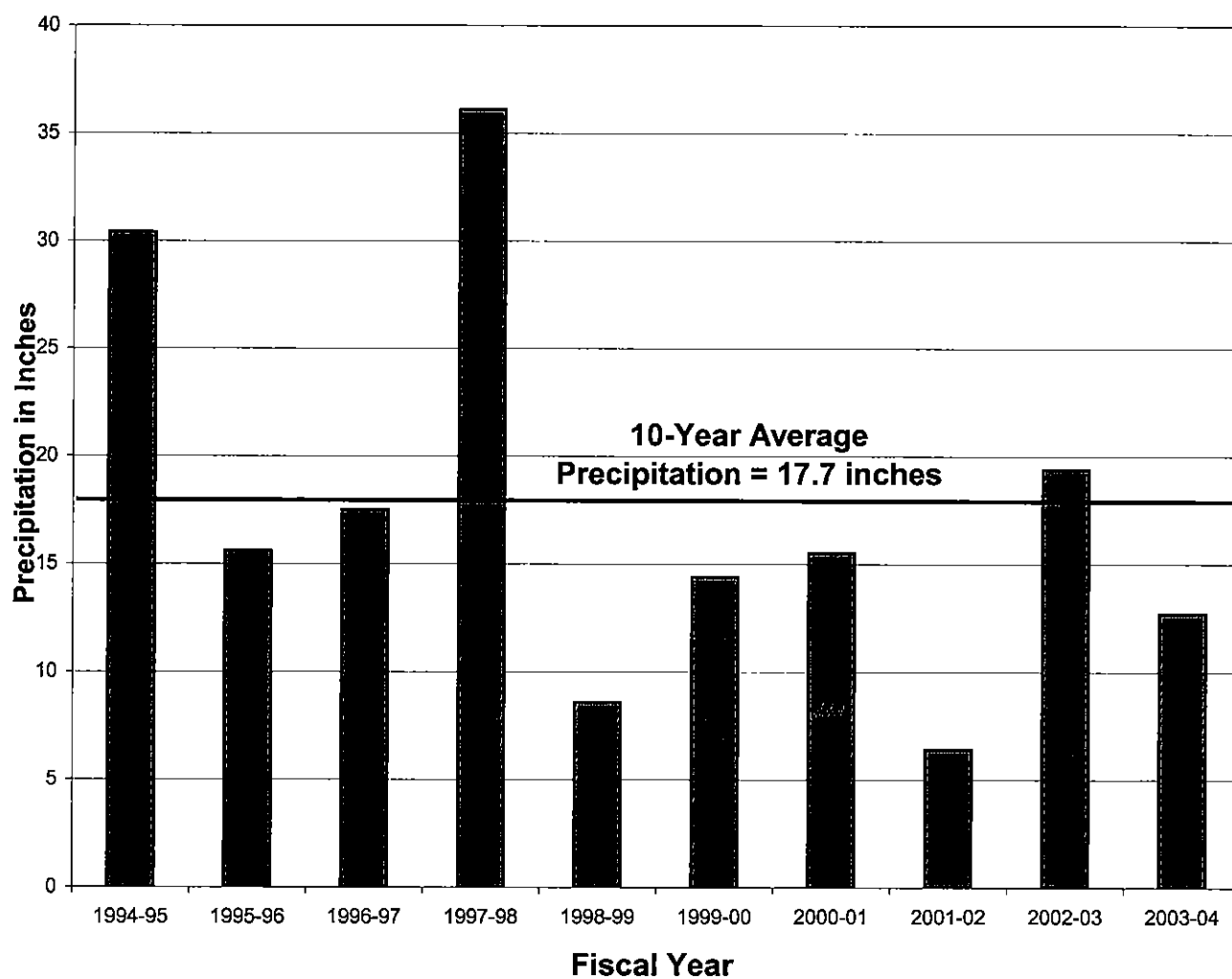
PHASE	POTENTIAL USERS	ESTIMATED AMOUNT OF RECYCLED WATER USE
I	Mill Elementary School, Rio Hondo College Rose Hills Cemetary and Other Small Users ¹	1,800
IIA	Whittier Narrows Recreation Center, an Adjacent Nursery, a Local High School and some Agricultural Uses	4,000
IIB	CIR Project including Future Customers in South Los Angeles County ²	8,867
III	Golf Course in the City of Pico Rivera, Southern California Edison Facilities, CalTrans and Future Irrigation Customers in the Cities of El Monte, South El Monte, Irwindale and Arcadia	2,500

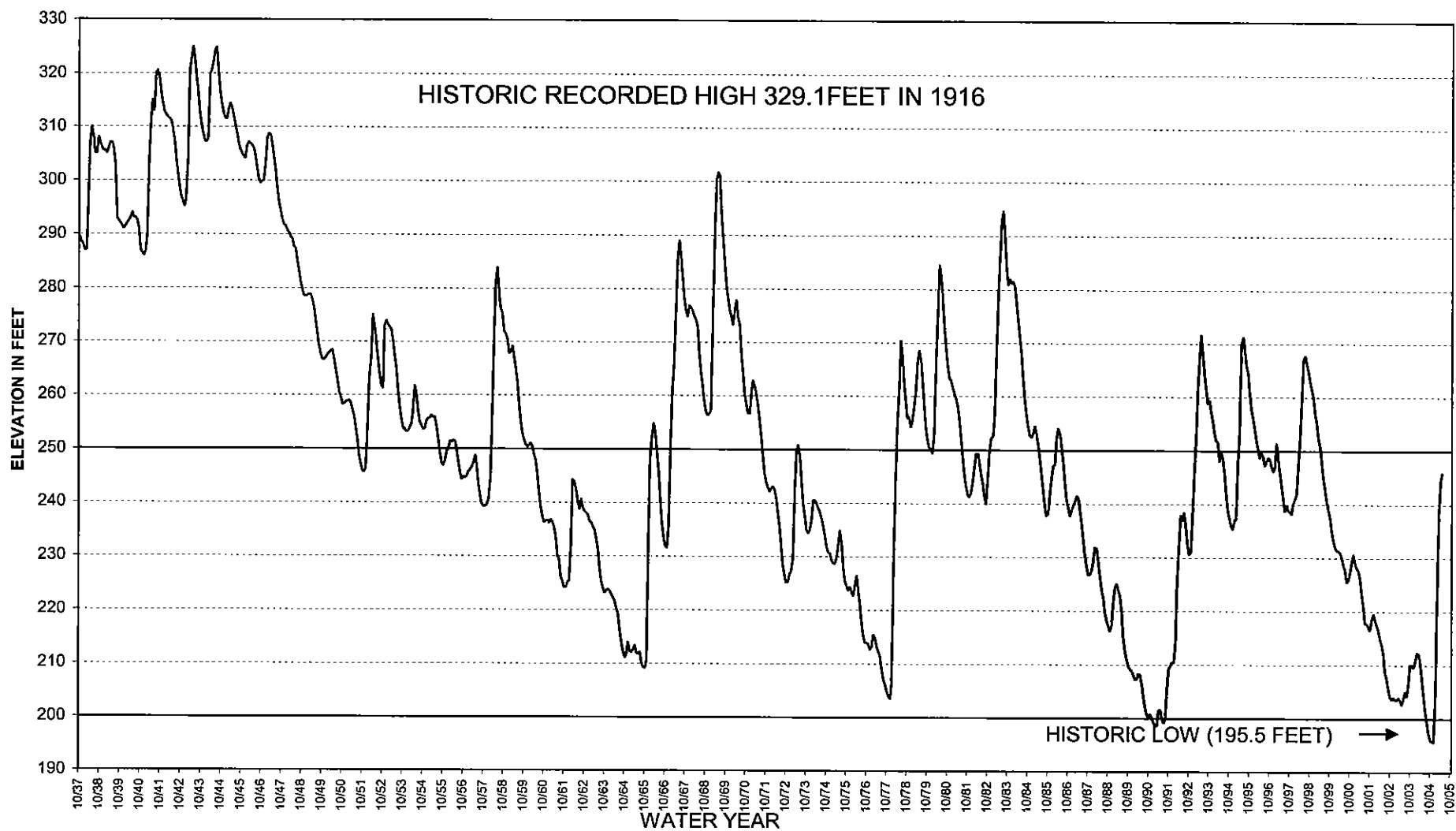
1. Phase I has been completed and users are currently receiving Recycled Water as shown in Table 9

2. CIR Project is a multi-agency Recycled Water expansion including the City of Industry, Rowland Water District, Suburban Water Systems and Walnut Valley Water District

Figure 1

Annual Rainfall in the San Gabriel Valley





STETSON ENGINEERS INC.

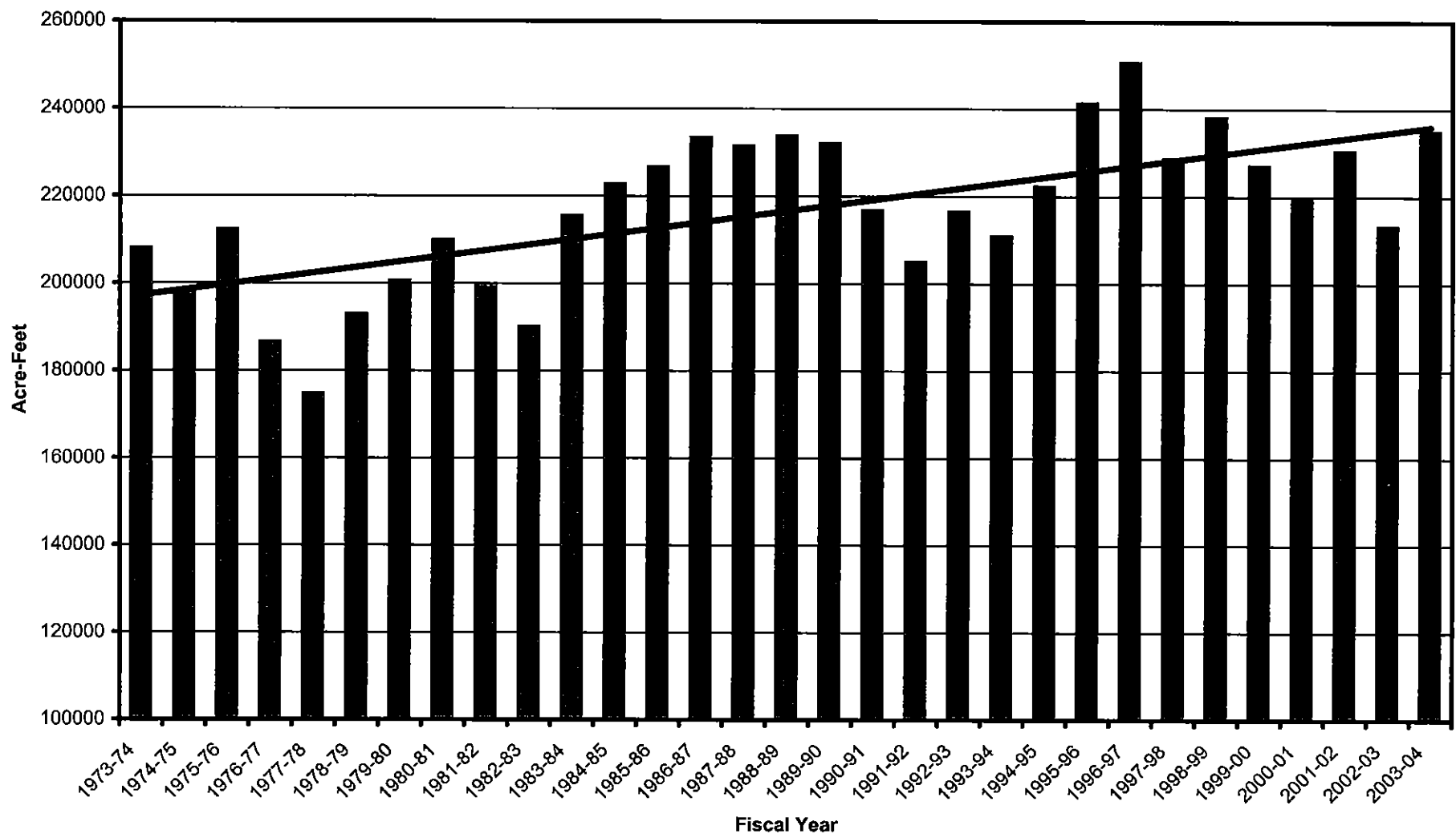
Covina San Rafael Mesa, Arizona

WATER RESOURCE ENGINEERS

UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT

HISTORIC BALDWIN PARK KEY WELL ELEVATION

Figure 2



STETSON ENGINEERS INC.

Covina San Rafael Mesa, Arizona

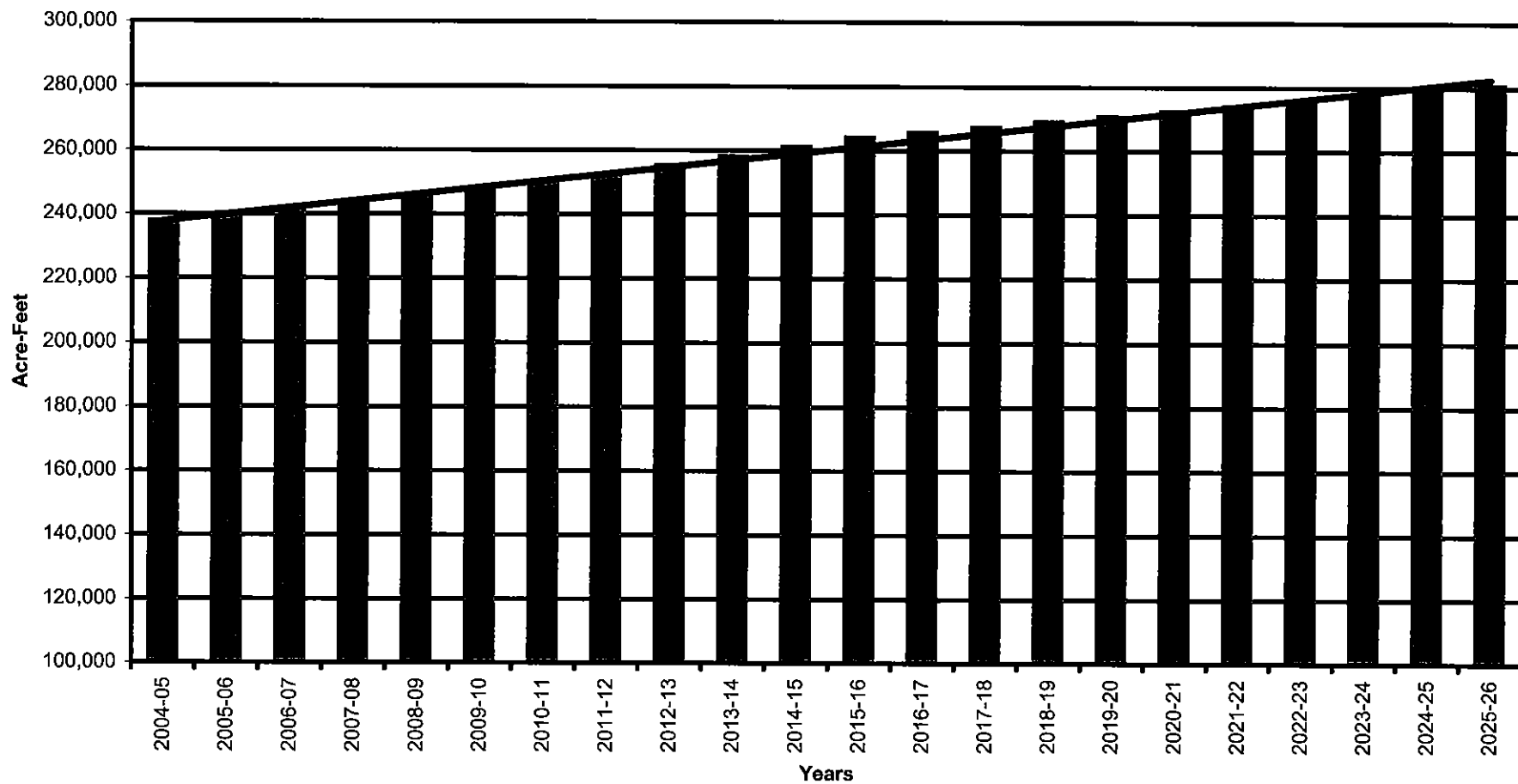
WATER RESOURCE ENGINEERS

UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT

Past and Current Water Use¹

1. Total Water Use including water produced from the Main Basin, Imported water delivered for Direct Use and Recycled Water Use.

Figure 3



STETSON ENGINEERS INC.

Covina San Rafael Mesa, Arizona

WATER RESOURCE ENGINEERS

UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT

Current and Projected Water Use¹

Figure 4

1. Total Water Use including water produced from the Main Basin, Imported water for Direct Use and Recycled Water Use.

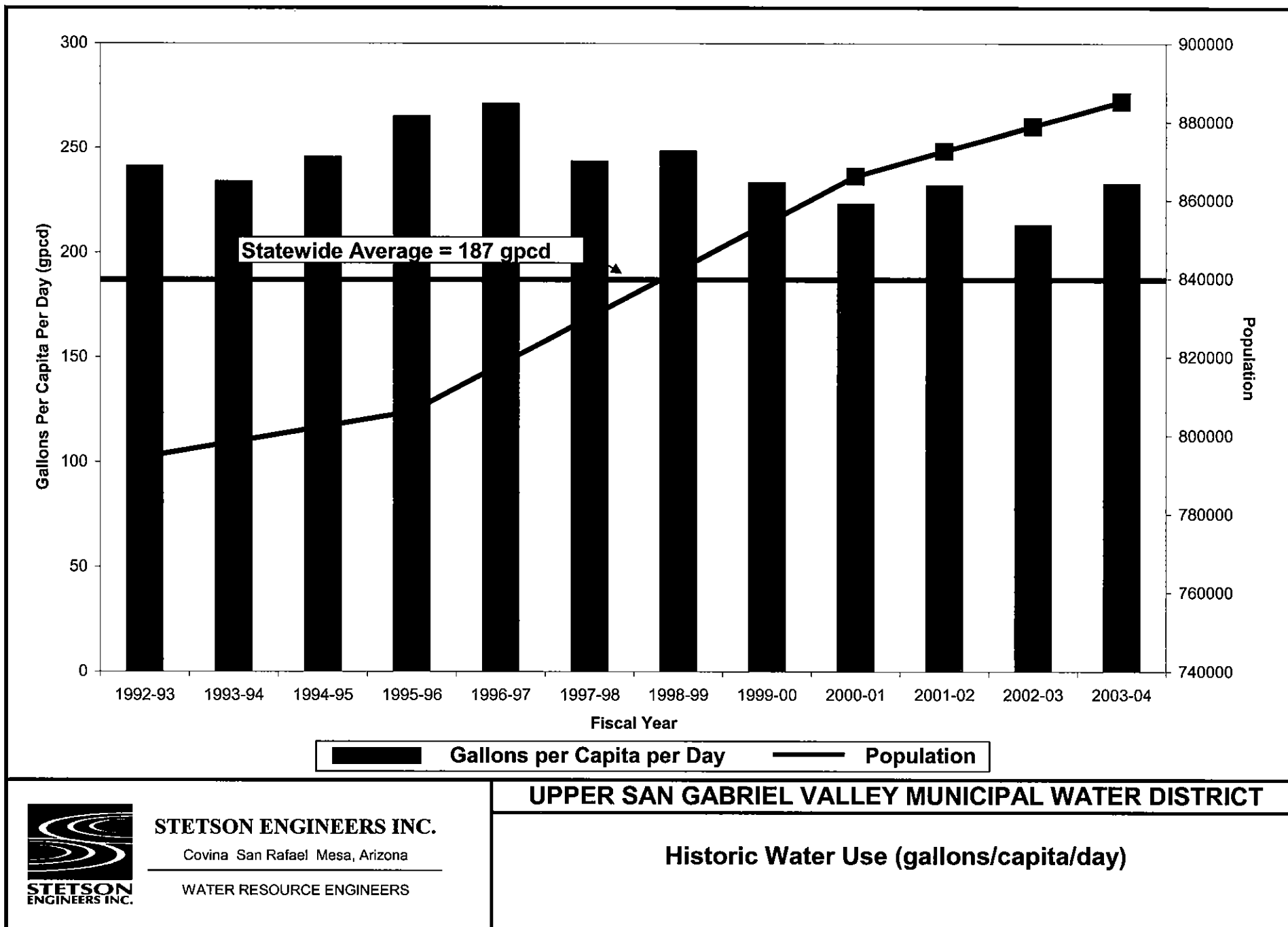
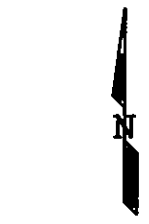
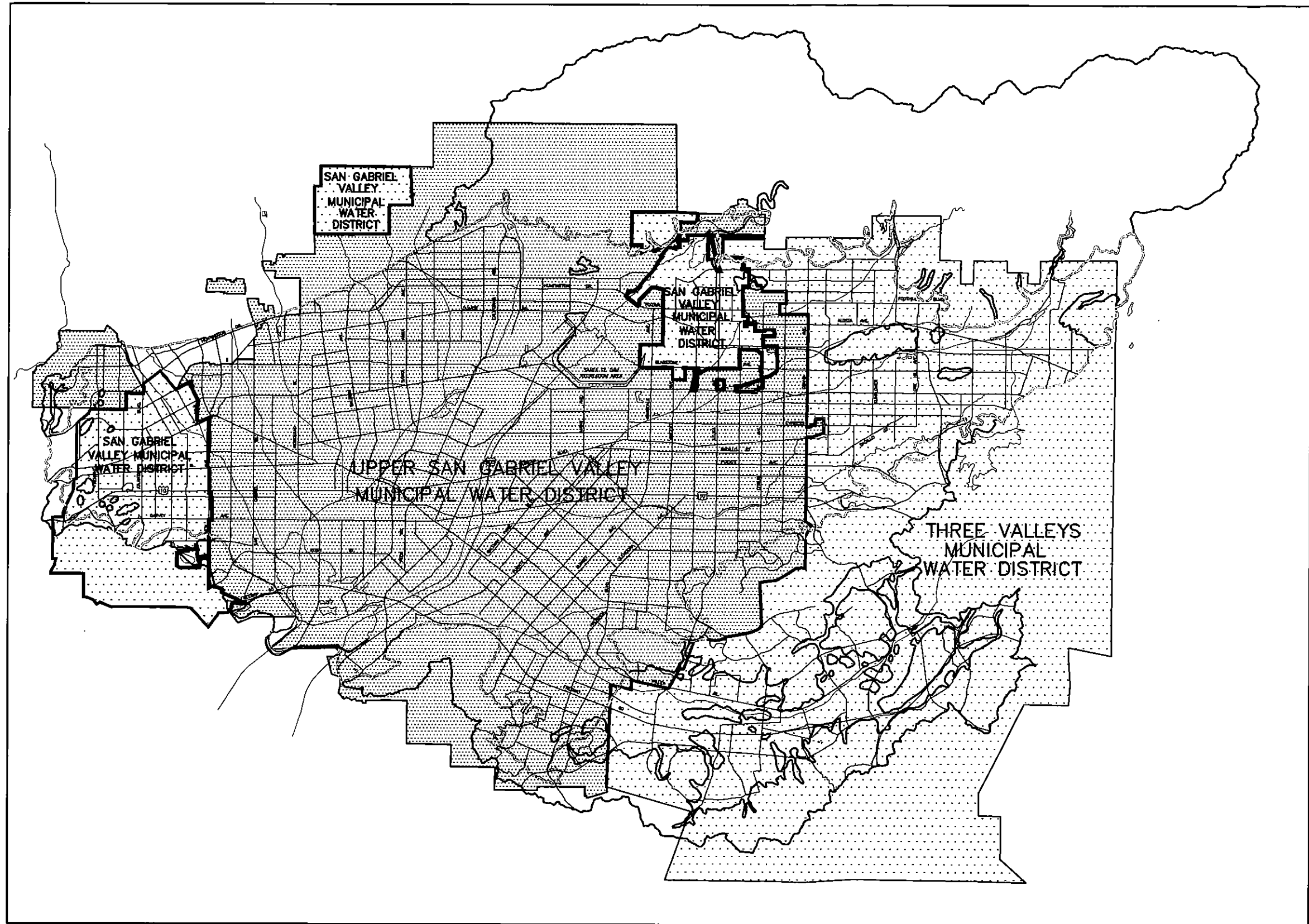

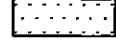
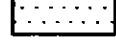



Figure 5



APPROXIMATE SCALE
1" = 9,500'

LEGEND

-  UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT
-  THREE VALLEYS MUNICIPAL WATER DISTRICT
-  SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT
-  MAIN SAN GABRIEL BASIN BOUNDARY

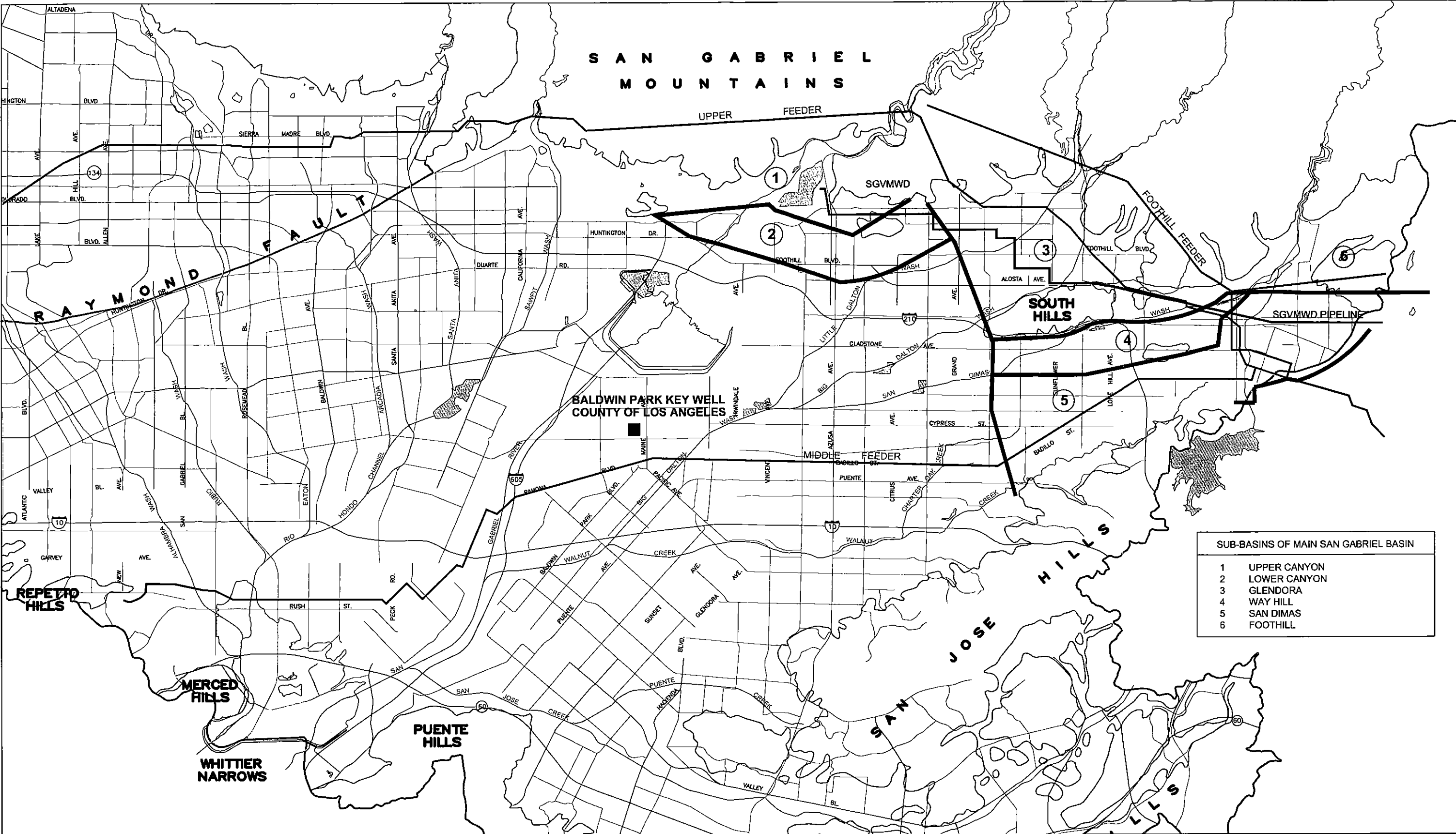
UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT

WATER DISTRICT BOUNDARIES



861 Village Oaks Drive, Suite 100 • Covina, California 91724
TEL: (626) 967-6202
FAX: (626) 331-7065

2171 E Francisco Blvd., Suite K • San Rafael California 94901
2651 W Guadalupe Rd., Suite A209 • Mesa Arizona 85202



SUB-BASINS OF MAIN SAN GABRIEL BASIN	
1	UPPER CANYON
2	LOWER CANYON
3	GLENDORA
4	WAY HILL
5	SAN DIMAS
6	FOOTHILL

UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT

SAN GABRIEL VALLEY/ MAIN SAN GABRIEL BASIN



STETSON
ENGINEERS INC.

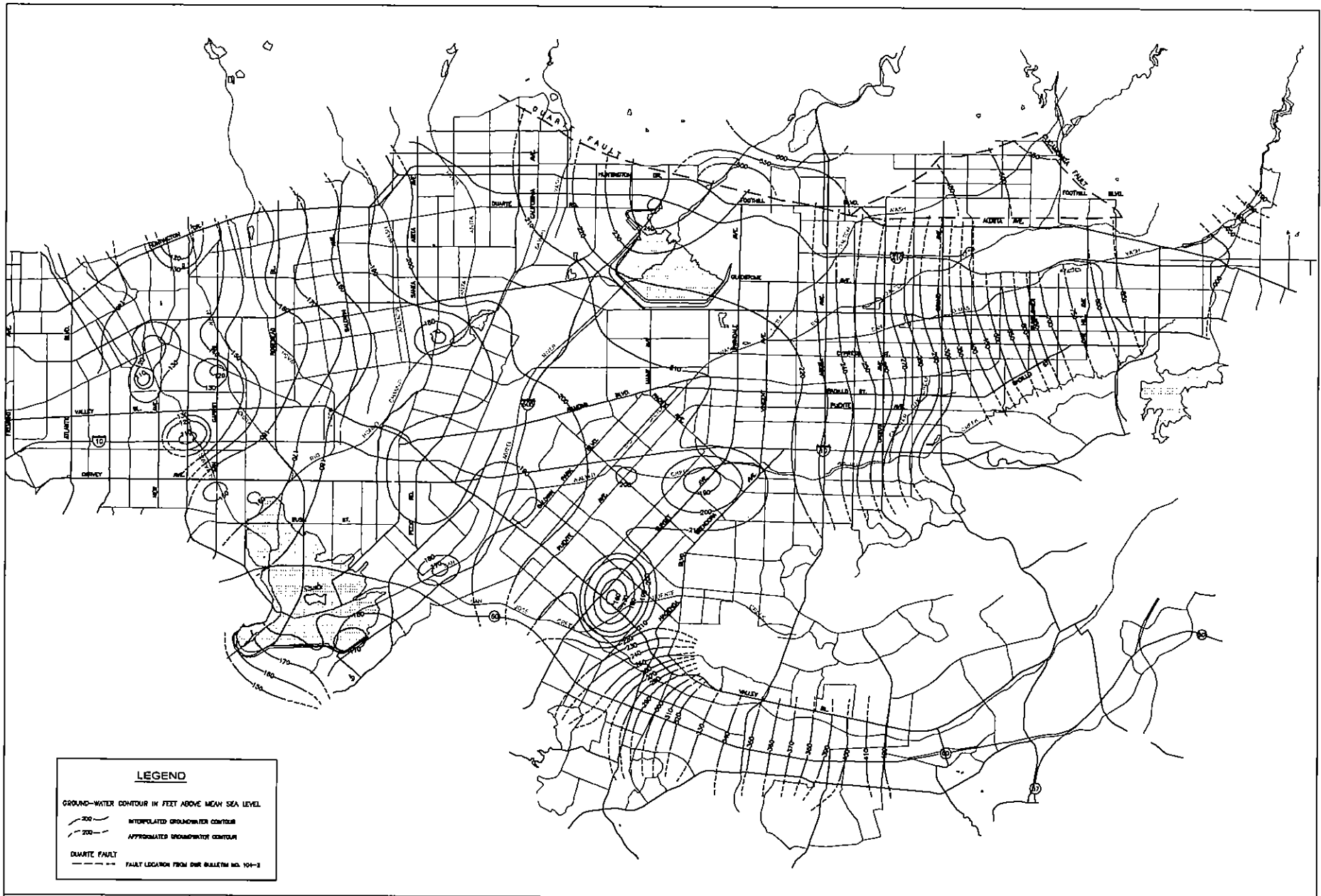
851 VILLAGE OAKS DRIVE, SUITE 100
COVINA, CALIFORNIA 91724
TEL: (626) 967-8202
FAX: (626) 331-7065

2171 E. FRANCISCO BLVD., SUITE K
SAN RAFAEL, CALIFORNIA 94901

2651 W. GUADALUPE RD., SUITE A209
MESA, ARIZONA 85202



APPROXIMATE SCALE
1" = 7,000'



STETSON
ENGINEERS INC.

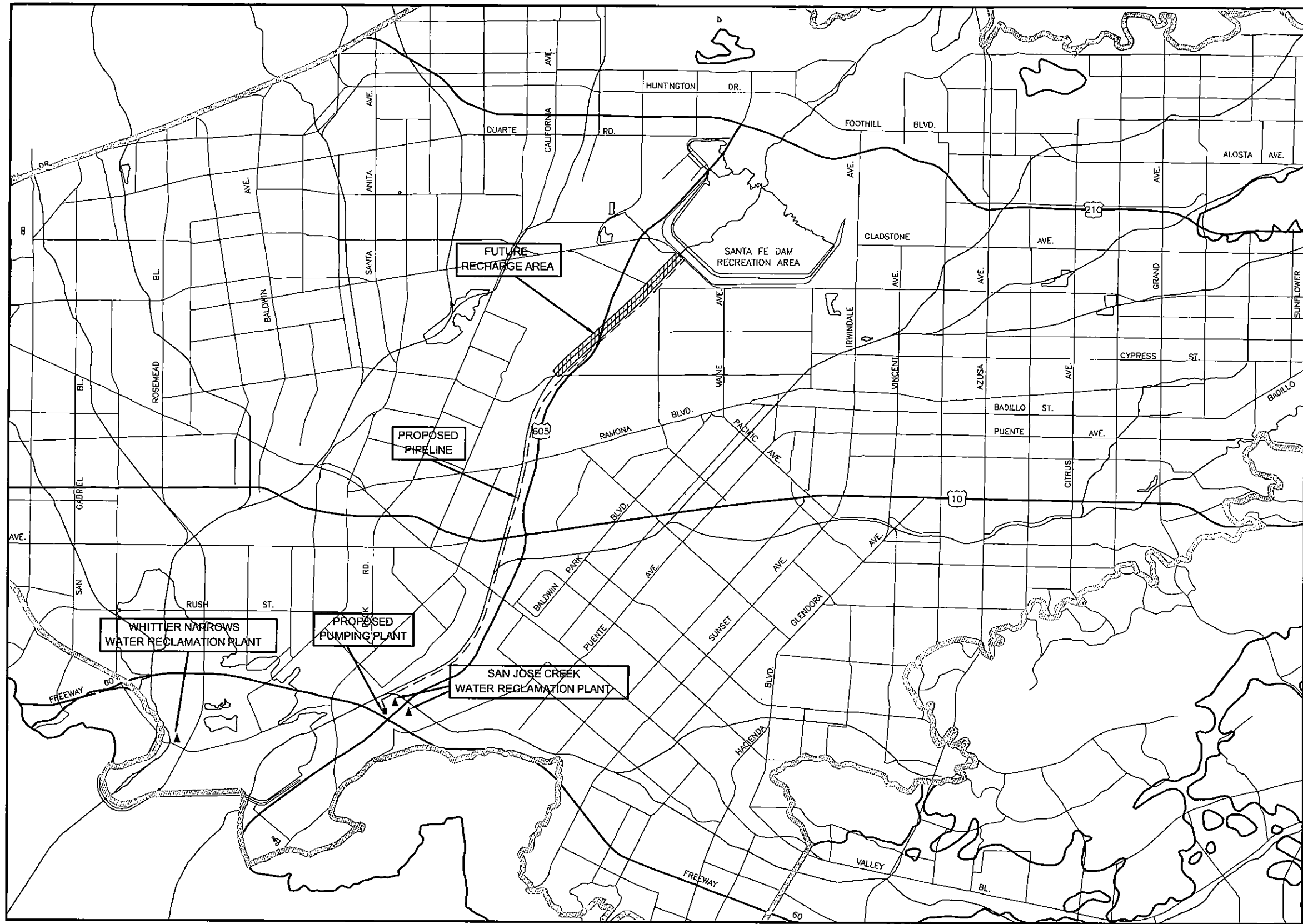
851 VILLAGES DRIVE, SUITE 100
Covina, CA 91724
TEL: (909) 964-8232
FAX: (909) 964-1055

2171 E. FARMERS RD., SUITE 100
San Rafael, CA 94901
TEL: (415) 456-1200
FAX: (415) 456-1201

UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT

GROUNDWATER CONTOUR MAP FOR SAN GABRIEL BASIN - JANUARY 2004

E:\JOBS\11048\11048-17\2005 UWM\PLATE 4.DWG
E:\JOBS\11048\11048-17\2005 UWM\PLATE 4.DWG



APPROXIMATE SCALE
1" = 9,500'

LEGEND

- PROPOSED PIPELINE ALIGNMENT
- ▲ EXISTING WATER RECLAMATION PLANT
- PROPOSED PUMP STATION
- BASIN BOUNDARY AND WATERSHED

UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT

WATER RECLAMATION PLANT LOCATIONS



861 Village Oaks Drive, Suite 100 • Covina, California 91724
2171 E Francis St, Suite R • San Rafael, California 94901
2651 W Guadalupe Rd., Suite A200 • Mesa, Arizona 85202

APPENDIX A

Urban Water Management Planning Act

Established: AB 797, Klehs, 1983

Amended: AB 2661, Klehs, 1990

AB 11X, Filante, 1991

AB 1869, Speier, 1991

AB 892, Frazee, 1993

SB 1017, McCorquodale, 1994

AB 2853, Cortese, 1994

AB 1845, Cortese, 1995

SB 1011, Polanco, 1995

AB 2552, Bates, 2000

SB 553, Kelley, 2000

SB 610, Costa, 2001

AB 901, Daucher, 2001

SB 672, Machado, 2001

SB 1348, Brulte, 2002

SB 1384 Costa, 2002

SB 1518 Torlakson, 2002

AB 105, Wiggins, 2003

SB 318, Alpert, 2004

CALIFORNIA WATER CODE DIVISION 6

PART 2.6. URBAN WATER MANAGEMENT PLANNING

CHAPTER 1. GENERAL DECLARATION AND POLICY

10610. This part shall be known and may be cited as the "Urban Water Management Planning Act."

10610.2. (a) The Legislature finds and declares all of the following:

- (1) The waters of the state are a limited and renewable resource subject to ever-increasing demands.
- (2) The conservation and efficient use of urban water supplies are of statewide concern; however, the planning for that use and the implementation of those plans can best be accomplished at the local level.
- (3) A long-term, reliable supply of water is essential to protect the productivity of California's businesses and economic climate.
- (4) As part of its long-range planning activities, every urban water supplier should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry water years.
- (5) Public health issues have been raised over a number of contaminants that have been identified in certain local and imported water supplies.
- (6) Implementing effective water management strategies, including groundwater storage projects and recycled water projects, may require specific water quality and salinity targets for meeting groundwater basins water quality objectives and promoting beneficial use of recycled water.
- (7) Water quality regulations are becoming an increasingly important factor in water agencies' selection of raw water sources, treatment alternatives, and modifications to existing treatment facilities.
- (8) Changes in drinking water quality standards may also impact the usefulness of water supplies and may ultimately impact supply reliability.
- (9) The quality of source supplies can have a significant impact on water management strategies and supply reliability.

(b) This part is intended to provide assistance to water agencies in carrying out their long-term resource planning responsibilities to ensure adequate water supplies to meet existing and future demands for water.

10610.4. The Legislature finds and declares that it is the policy of the state as follows:

(a) The management of urban water demands and efficient use of water shall be actively pursued to protect both the people of the state and their water resources.

(b) The management of urban water demands and efficient use of urban water supplies shall be a guiding criterion in public decisions.

(c) Urban water suppliers shall be required to develop water management plans to actively pursue the efficient use of available supplies.

CHAPTER 2. DEFINITIONS

10611. Unless the context otherwise requires, the definitions of this chapter govern the construction of this part.

10611.5. "Demand management" means those water conservation measures, programs, and incentives that prevent the waste of water and promote the reasonable and efficient use and reuse of available supplies.

10612. "Customer" means a purchaser of water from a water supplier who uses the water for municipal purposes, including residential, commercial, governmental, and industrial uses.

10613. "Efficient use" means those management measures that result in the most effective use of water so as to prevent its waste or unreasonable use or unreasonable method of use.

10614. "Person" means any individual, firm, association, organization, partnership, business, trust, corporation, company, public agency, or any agency of such an entity.

10615. "Plan" means an urban water management plan prepared pursuant to this part. A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities. The components of the plan may vary according to an individual community or area's characteristics and its capabilities to efficiently use and conserve water. The plan shall address measures for residential, commercial, governmental, and industrial water demand management as set forth in Article 2 (commencing with Section 10630) of Chapter 3. In addition, a strategy and time schedule for implementation shall be included in the plan.

10616. "Public agency" means any board, commission, county, city and county, city, regional agency, district, or other public entity.

10616.5. "Recycled water" means the reclamation and reuse of wastewater for beneficial use.

10617. "Urban water supplier" means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers. This part applies only to water supplied from public water systems subject to Chapter 4 (commencing with Section 116275) of Part 12 of Division 104 of the Health and Safety Code.

CHAPTER 3. URBAN WATER MANAGEMENT PLANS

Article 1. General Provisions

10620.

(a) Every urban water supplier shall prepare and adopt an urban water management plan in the manner set forth in Article 3 (commencing with Section 10640).

(b) Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.

(c) An urban water supplier indirectly providing water shall not include planning elements in its water management plan as provided in Article 2 (commencing with Section 10630) that would be applicable to urban water suppliers or public agencies directly providing water, or to their customers, without the consent of those suppliers or public agencies.

(d)(1) An urban water supplier may satisfy the requirements of this part by participation in area wide, regional, watershed, or basin wide urban water management planning where those plans will reduce preparation costs and contribute to the achievement of conservation and efficient water use.

(2) Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.

(e) The urban water supplier may prepare the plan with its own staff, by contract, or in cooperation with other governmental agencies.

(f) An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.

10621.

(a) Each urban water supplier shall update its plan at least once every five years on or before December 31, in years ending in five and zero.

(b) Every urban water supplier required to prepare a plan pursuant to this part shall notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.

(c) The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640).

Article 2. Contents of Plans

10630. It is the intention of the Legislature, in enacting this part, to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied.

10631. A plan shall be adopted in accordance with this chapter and shall do all of the following:

(a) Describe the service area of the supplier, including current and projected population, climate, and other demographic factors affecting the supplier's water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available.

(b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a). If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information shall be included in the plan:

- (1) A copy of any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing with Section 10750), or any other specific authorization for groundwater management.
- (2) A description of any groundwater basin or basins from which the urban water supplier pumps groundwater. For those basins for which a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the urban water supplier has the legal right to pump under the order or decree. For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to eliminate the long-term overdraft condition.
- (3) A detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.
- (4) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(c) Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage, to the extent practicable, and provide data for each of the following:

- (1) An average water year.
- (2) A single dry water year.
- (3) Multiple dry water years.

For any water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climatic factors, describe plans to supplement or replace that source with alternative sources or water demand management measures, to the extent practicable.

(d) Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.

(e)(1) Quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, identifying the uses among water use sectors including, but not necessarily limited to, all of the following uses:

- (A) Single-family residential.
- (B) Multifamily.
- (C) Commercial.
- (D) Industrial.
- (E) Institutional and governmental.

- (F) Landscape.
 - (G) Sales to other agencies.
 - (H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof.
 - (I) Agricultural.
- (2) The water use projections shall be in the same five-year increments described in subdivision (a).
- (f) Provide a description of the supplier's water demand management measures. This description shall include all of the following:
- (1) A description of each water demand management measure ~~that~~ is currently being implemented, or scheduled for implementation, including the steps necessary to implement any proposed measures, including, but not limited to, all of the following:
- (A) Water survey programs for single-family residential and multifamily residential customers.
 - (B) Residential plumbing retrofit.
 - (C) System water audits, leak detection, and repair.
 - (D) Metering with commodity rates for all new connections and retrofit of existing connections.
 - (E) Large landscape conservation programs and incentives.
 - (F) High-efficiency washing machine rebate programs.
 - (G) Public information programs.
 - (H) School education programs.
 - (I) Conservation programs for commercial, industrial, and institutional accounts.
 - (J) Wholesale agency programs.
 - (K) Conservation pricing.
 - (L) Water conservation coordinator.
 - (M) Water waste prohibition.
 - (N) Residential ultra-low-flush toilet replacement programs.
- (2) A schedule of implementation for all water demand management measures proposed or described in the plan.
- (3) A description of the methods, if any, that the supplier will use to evaluate the effectiveness of water demand management measures implemented or described under the plan.
- (4) An estimate, if available, of existing conservation savings on water use within the supplier's service area, and the effect of the savings on the supplier's ability to further reduce demand.
- (g) An evaluation of each water demand management measure listed in paragraph (1) of subdivision (f) that is not currently being implemented or scheduled for implementation. In the course of the evaluation, first consideration shall be given to water demand management measures, or combination of measures, that offer lower incremental costs than expanded or additional water supplies. This evaluation shall do all of the following:
- (1) Take into account economic and noneconomic factors, including environmental, social, health, customer impact, and technological factors.
 - (2) Include a cost-benefit analysis, identifying total benefits and total costs.
 - (3) Include a description of funding available to implement any planned water supply project that would provide water at a higher unit cost.
 - (4) Include a description of the water supplier's legal authority to implement the measure and efforts to work with other relevant agencies to ensure the implementation of the measure and to share the cost of implementation.
- (h) Include a description of all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs, other than the demand management programs identified pursuant to paragraph (1) of subdivision (f), that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in average, single-dry, and multiple-dry water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.
- (i) Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.
- (j) Urban water suppliers that are members of the California Urban Water Conservation Council and submit annual reports to that council in accordance with the "Memorandum of Understanding Regarding Urban Water Conservation in California," dated September 1991, may submit the annual reports identifying water demand

management measures currently being implemented, or scheduled for implementation, to satisfy the requirements of subdivisions (f) and (g).

(k) Urban water suppliers that rely upon a wholesale agency for a source of water, shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier's plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water -year types in accordance with subdivision (c). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (c).

10631.5. The department shall take into consideration whether the urban water supplier is implementing or scheduled for implementation, the water demand management activities that the urban water supplier identified in its urban water management plan, pursuant to Section 10631, in evaluating applications for grants and loans made available pursuant to Section 79163. The urban water supplier may submit to the department copies of its annual reports and other relevant documents to assist the department in determining whether the urban water supplier is implementing or scheduling the implementation of water demand management activities.

10632. The plan shall provide an urban water shortage contingency analysis that includes each of the following elements that are within the authority of the urban water supplier:

(a) Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a 50 percent reduction in water supply, and an outline of specific water supply conditions which are applicable to each stage.

(b) An estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency's water supply.

(c) Actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.

(d) Additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.

(e) Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.

(f) Penalties or charges for excessive use, where applicable.

(g) An analysis of the impacts of each of the actions and conditions described in subdivisions (a) to (f), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.

(h) A draft water shortage contingency resolution or ordinance.

(i) A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.

10633. The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area, and shall include all of the following:

(a) A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.

(b) A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.

(c) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.

(d) The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.

(e) A description of actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.

(f) A plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.

10634. The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.

Article 2.5 Water Service Reliability

10635. (a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and multiple dry water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

(b) The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan.

(c) Nothing in this article is intended to create a right or entitlement to water service or any specific level of water service.

(d) Nothing in this article is intended to change existing law concerning an urban water supplier's obligation to provide water service to its existing customers or to any potential future customers.

Article 3. Adoption and Implementation of Plans

10640. Every urban water supplier required to prepare a plan pursuant to this part shall prepare its plan pursuant to Article 2 (commencing with Section 10630). The supplier shall likewise periodically review the plan as required by Section 10621, and any amendments or changes required as a result of that review shall be adopted pursuant to this article.

10641. An urban water supplier required to prepare a plan may consult with, and obtain comments from, any public agency or state agency or any person who has special expertise with respect to water demand management methods and techniques.

10642. Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan. Prior to adopting a plan, the urban water supplier shall make the plan available for public inspection and shall hold a public hearing thereon. Prior to the hearing, notice of the time and place of hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code. The urban water supplier shall provide notice of the time and place of hearing to any city or county within which the supplier provides water supplies. A privately owned water supplier shall provide an equivalent notice within its service area. After the hearing, the plan shall be adopted as prepared or as modified after the hearing.

10643. An urban water supplier shall implement its plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan.

10644. (a) An urban water supplier shall submit to the department, the California State Library, and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. Copies of amendments or changes to the plans shall be submitted to the department, the California State Library, and any city or county within which the supplier provides water supplies within 30 days after adoption.

(b) The department shall prepare and submit to the Legislature, on or before December 31, in the years ending in six and one, a report summarizing the status of the plans adopted pursuant to this part. The report prepared by the department shall identify the outstanding elements of the individual plans. The department shall provide a copy of the report to each urban water supplier that has filed its plan with the department. The department

shall also prepare reports and provide data for any legislative hearings designed to consider the effectiveness of plans submitted pursuant to this part.

10645. Not later than 30 days after filing a copy of its plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.

CHAPTER 4. MISCELLANEOUS PROVISIONS

10650. Any actions or proceedings to attack, review, set aside, void, or annul the acts or decisions of an urban water supplier on the grounds of noncompliance with this part shall be commenced as follows:

(a) An action or proceeding alleging failure to adopt a plan shall be commenced within 18 months after that adoption is required by this part.

(b) Any action or proceeding alleging that a plan, or action taken pursuant to the plan, does not comply with this part shall be commenced within 90 days after filing of the plan or amendment thereto pursuant to Section 10644 or the taking of that action.

10651. In any action or proceeding to attack, review, set aside, void, or annul a plan, or an action taken pursuant to the plan by an urban water supplier on the grounds of noncompliance with this part, the inquiry shall extend only to whether there was a prejudicial abuse of discretion. Abuse of discretion is established if the supplier has not proceeded in a manner required by law or if the action by the water supplier is not supported by substantial evidence.

10652. The California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) does not apply to the preparation and adoption of plans pursuant to this part or to the implementation of actions taken pursuant to Section 10632. Nothing in this part shall be interpreted as exempting from the California Environmental Quality Act any project that would significantly affect water supplies for fish and wildlife, or any project for implementation of the plan, other than projects implementing Section 10632, or any project for expanded or additional water supplies.

10653. The adoption of a plan shall satisfy any requirements of state law, regulation, or order, including those of the State Water Resources Control Board and the Public Utilities Commission, for the preparation of water management plans or conservation plans; provided, that if the State Water Resources Control Board or the Public Utilities Commission requires additional information concerning water conservation to implement its existing authority, nothing in this part shall be deemed to limit the board or the commission in obtaining that information. The requirements of this part shall be satisfied by any urban water demand management plan prepared to meet federal laws or regulations after the effective date of this part, and which substantially meets the requirements of this part, or by any existing urban water management plan which includes the contents of a plan required under this part.

10654. An urban water supplier may recover in its rates the costs incurred in preparing its plan and implementing the reasonable water conservation measures included in the plan. Any best water management practice that is included in the plan that is identified in the "Memorandum of Understanding Regarding Urban Water Conservation in California" is deemed to be reasonable for the purposes of this section.

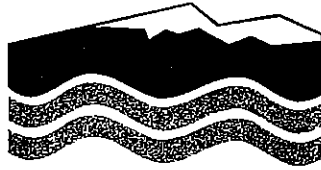
10655. If any provision of this part or the application thereof to any person or circumstances is held invalid, that invalidity shall not affect other provisions or applications of this part which can be given effect without the invalid provision or application thereof, and to this end the provisions of this part are severable.

10656. An urban water supplier that does not prepare, adopt, and submit its urban water management plan to the department in accordance with this part, is ineligible to receive funding pursuant to Division 24 (commencing with Section 78500) or Division 26 (commencing with Section 79000), or receive drought assistance from the state until the urban water management plan is submitted pursuant to this article.

10657. (a) The department shall take into consideration whether the urban water supplier has submitted an updated urban water management plan that is consistent with Section 10631, as amended by the act that adds this section, in determining whether the urban water supplier is eligible for funds made available pursuant to any program administered by the department.

(b) This section shall remain in effect only until January 1, 2006, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2006, deletes or extends that date.

APPENDIX B
Notification to Agencies within
Service Area



UPPER SAN GABRIEL VALLEY
MUNICIPAL WATER DISTRICT

July 13, 2005

Mr. Dominic T. Cimarusti
Adams Ranch Mutual Water Company
9343 Pitkin Street
Rosemead, CA 91770

SUBJECT: Urban Water Management Plan Update

Dear Dominic:

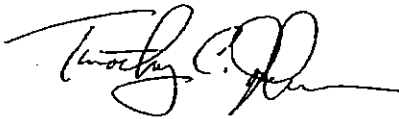
As you know, the Urban Water Management Planning Act requires every "urban water supplier"¹ to prepare and adopt an Urban Water Management Plan (UWMP) and periodically update that plan at least once every five years on or before December 31, in years ending in five and zero. The UWMP process was created to provide a uniform method for urban water suppliers to evaluate their water supply reliability and document their existing and proposed water supply development and demand management efforts. Upper San Gabriel Valley Municipal Water District (Upper District) is currently in the process of updating its 2000 UWMP.

Because the Upper District is a wholesale water supply agency, its UWMP is considered a regional plan under the water code. As such, the District's sub-agencies can satisfy their requirements for preparing individual plans by participating in the Upper District's efforts and adopting the Upper District UWMP. In the past, the Upper District has invited all sub-agencies to participate in the UWMP development. In calendar year 2000, the City of Monrovia, California American Water Company, San Gabriel Valley Water Company, Southern California Water Company, Suburban Water Systems, Sunny Slope Mutual Water Company and the City of Whittier satisfied their UWMP requirements by participating in the Upper District efforts. The Upper District will continue this practice for the 2005 update of its UWMP and is inviting all sub-agencies to participate in the plan update efforts.

¹Section 10617 of the Urban Water Management Planning Act states, "'Urban Water Supplier' means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually."

On July 19, 2005 at 4:00 p.m., the Upper District Board of Directors will conduct a workshop on the UWMP process. Please feel free to attend that workshop if your schedule permits. However, if you or a representative from your organization is not able to attend the workshop but you wish to participate in the Upper District's UWMP update, please contact Mr. Kevin Smead of Stetson Engineers at (626) 967-6202 at your earliest convenience.

Sincerely,

A handwritten signature in black ink, appearing to read "Timothy C. Jochem". The signature is fluid and cursive, with a large initial "T" and "J".

Timothy C. Jochem
General Manager

cc: Kevin Smead
Steve Johnson

Adams Ranch Mutual Water
Company
Mr. Dominic T. Cimarusti
9343 Pitkin Street
Rosemead, CA 91770
(626) 625-8931
mcimarus@pacbell.net

Amarillo Mutual Water
Company
Mr. John Holzinger
Ms. Blanche Vizzini
3404 North Burton Ave.
Rosemead, CA
(626) 280-0660
Amarillo1920@sbcglobal.net

City of Arcadia
Mr. Tom Tait
Mr. Pat Malloy
P.O. Box 60021
11800 Gold Ring Road
Arcadia, CA 91006-6021
(626) 256-6551
ttait@ci.arcadia.ca.us
pmalloy@ci.arcadia.ca.us

City of Azusa
Light & Water
Mr. Joseph Hsu
Mr. Chet Anderson
729 N. Azusa Ave.
Azusa, CA 91702
(626) 812-5219
jhsu@ci.azusa.ca.us
canderson@ci.azusa.ca.us

California American Water
Company
(Duarte System and San
Marino)
Mr. Gary Valladao
Mr. Joe Marcinko
2020 Huntington Drive
San Marino, CA 91108
jmarcinko@amwater.com

California Domestic Water
Company
Mr. Jim Byerrum
Mr. Che Venegas
P.O. Box 1338
Whittier, CA 90609
(562) 947-3811
jbyerrum@cdwc.com
cvenegas@cdwc.com

Champion Mutual Water
Company
Mr. Bryan Hellein
P.O. Box 4093
El Monte, CA 91734
bhellein@ci.el-monte.ca.us

City of Covina
Ms. Monda Buckley
125 East College Street
Covina, CA 91723
(626) 858-7294
mbuckley@ci.covina.ca.us

Covina Irrigating Company
Mr. David de Jesus
125 East College Street
Covina, CA 92428
(626) 332-1502
daviddi@cich2o.com

Del Rio Mutual Water Company
Mr. Dario Herrera
12417 Clinton
El Monte, CA 91734
(626) 350-0381

East Pasadena Water Co., Ltd.
Mr. Wayne Goehring
3725 East Mountainview Ave.
Pasadena, CA 91107
(626) 793-6189
wayne@epwater.com

City of El Monte
Mr. Bryan Hellein
3527 Santa Anita Ave.
El Monte, CA 91731
(626) 580-2250
bhellein@ci.el-monte.ca.us

City of Glendora
Mr. Steve Patton
Mr. Randy Carter
116 E. Foothill Blvd.
Glendora, CA 91741
(626) 914-8245
spatton@ci.glendora.ca.us
rcarter@ci.glendora.ca.us

Hemlock Mutual Water
Company
Mr. Robert McClung
12066 Celine Street
El Monte, CA 91732
(626) 448-7100

Industry Public Works
Mr. Michael Berlien
C/O La Puente Water District
112 North First Street
La Puente, CA 91744
(626) 330-2126
mberlien.lpvcd@verizon.net

La Puente Valley County Water
District
Mr. Michael Berlien
112 N. 1st St.
La Puente, CA 91744
(626) 330-2126
mberlien.lpvcd@verizon.net

City of Monrovia
Mr. Ron Bow
415 South Ivy Avenue
Monrovia, CA 91016
(626) 256-8211
rbow@ci.monrovia.ca.us

Rurban Homes Mutual Water
Company
Mr. George Bucey
5044 No. Cogswell
El Monte, CA 91732
(626) 448-5272

San Gabriel County Water
District
Mr. Chuck Shaw
Mr. Steve Terra
P.O. Box 2227
San Gabriel, CA 91778-2227
(626) 287-0341
chuck0415@mindspring.com

San Gabriel Valley Water
Company
Mr. Dan Arrighi
P.O. Box 6010
El Monte, CA 91734
(626) 448-6183
darrighi@sgvwater.com

City of South Pasadena
Mr. Ken Kittridge
825 Mission Street
South Pasadena, CA 91030
(626) 403-7376
KKittridge@ci.south-pasadena.ca.us

Southern California Water
Company
San Gabriel District
Mr. Paul Williams
Ms. Heather Conklin
401 South San Dimas Canyon
Road
San Dimas, CA 91773
(909) 592-4271 x 106
paulwilliams@scwater.com
hmconklin@scwater.com

Sterling Mutual Water
Company
Ms. Joy Ann Burt
11922 Lambert Ave.
El Monte, CA 91732
(626) 350-9314

Suburban Water Systems
Mr. Paul Carver
Mr. Koby Cohen
1211 East Center Court Drive
Covina, CA 91724
(626) 543-2551
pcarver@suburbanwatersystems.com
kcohen@suburbanwatersystems.com

Sunny Slope Water Company
Mr. Michael Hart
1040 El Campo Drive
Pasadena, CA 91107
(626) 287-5238
sswc01@sbcglobal.net

Valencia Heights Water
Company
Mr. Dave Michalko
3009 Virginia Ave.
West Covina, CA 91791
(626) 332-8935
vhwc@aol.com

Valley County Water District
Mr. Mark Grajeda
14521 E. Ramona Blvd.
Baldwin Park, CA 91706
(626) 338-7301
mgrajeda@vcwdnet.com

Valley View Mutual Water
Company
Ms. Sukie Madrid
13730 E. Los Angeles St.
Baldwin Park, CA 91706
(626) 960-2759

City of Whittier
Mr. Leon Yehuda
13230 Penn Street
Whittier, CA 90601
(562) 464-3510
lyehuda@whittierch.org

J:\Jobs\1046\1046-17>Contact List.doc

APPENDIX C
Long Beach Judgment

Superior Court of the State of California
For the County of Los Angeles

BOARD OF WATER COMMISSIONERS OF
THE CITY OF LONG BEACH, et al.,

Plaintiffs

vs.

SAN GABRIEL VALLEY WATER COMPANY,
et al.,

Defendants

No. 722647

**SETTLEMENT
DOCUMENTS**

**STIPULATION FOR JUDGMENT
JUDGMENT**

**MAP OF WHITTIER NARROWS
ENGINEERING APPENDIX
REIMBURSEMENT CONTRACT**

*Approved by Joint Negotiating
Committees July 6, 1964.*

EXHIBIT NO. 7

1
2
3
4
5
6
7
8 SUPERIOR COURT OF THE STATE OF CALIFORNIA
9 FOR THE COUNTY OF LOS ANGELES
10

11 BOARD OF WATER COMMISSIONERS OF THE CITY
12 OF LONG BEACH, a municipal corporation;
13 CENTRAL BASIN MUNICIPAL WATER DISTRICT,
a municipal water district; and CITY OF
COMPTON, a municipal corporation,

14 Plaintiffs,

15 vs.

NO. 722,647

16 SAN GABRIEL VALLEY WATER COMPANY, a cor-
17 poration; AZUSA AGRICULTURAL WATER
COMPANY, a corporation; AZUSA VALLEY
18 WATER COMPANY, a corporation; CALIFORNIA
WATER & TELEPHONE COMPANY, a corporation;
19 THE COLUMBIA LAND AND WATER COMPANY, a
corporation; COVINA IRRIGATING COMPANY, a
20 corporation; CROSS WATER COMPANY, a cor-
poration; DUARTE WATER COMPANY, a corpora-
21 tion; EAST PASADENA WATER CO. LTD., a
corporation; GLENDORA IRRIGATING COMPANY,
22 a corporation; SAN DIMAS WATER COMPANY, a
corporation; SOUTHERN CALIFORNIA WATER
23 COMPANY, a corporation; SUBURBAN WATER
SYSTEMS, a corporation; SUNNY SLOPE WATER
24 CO., a corporation; VALLECITO WATER CO.,
a corporation; CITY OF ALHAMBRA, a municipi-
25 pal corporation; CITY OF ARCADIA, a
municipal corporation; CITY OF AZUSA, a
26 municipal corporation; CITY OF COVINA, a
municipal corporation; CITY OF EL MONTE,
27 a municipal corporation; CITY OF GLENDORA,
a municipal corporation; CITY OF MONROVIA,
28 a municipal corporation; CITY OF MONTEREY
PARK, a municipal corporation; CITY OF
29 SOUTH PASADENA, a municipal corporation;
BALDWIN PARK COUNTY WATER DISTRICT, a
30 county water district; and SAN GABRIEL
COUNTY WATER DISTRICT, a county water
31 district,

Defendants,

32 UPPER SAN GABRIEL VALLEY MUNICIPAL WATER

STIPULATION FOR
JUDGMENT

1 DISTRICT, a municipal water district, and)
2 CALIFORNIA DOMESTIC WATER COMPANY, a)
3 corporation,)
4 Intervenor.)

5 Plaintiffs Central Basin Municipal Water District, a
6 municipal water district (herein sometimes referred to as Central
7 Municipal); City of Long Beach, a municipal corporation, acting
8 by and through the Board of Water Commissioners of the City of
9 Long Beach; and City of Compton, a municipal corporation; and
10 defendants City of Alhambra, a municipal corporation; City of
11 Arcadia, a municipal corporation; City of Azusa, a municipal
12 corporation; Azusa Agricultural Water Company, a corporation, sued
13 herein as DOE 1; Azusa Valley Water Company, a corporation, for
14 itself and as successor by merger to Azusa Irrigating Company, a
15 corporation; Baldwin Park County Water District, a county water
16 district; California Water and Telephone Company, a corporation;
17 Columbia Land and Water Company, a corporation; City of Covina, a
18 municipal corporation; Covina Irrigating Company, a corporation;
19 Cross Water Company, a corporation, sued herein as DOE 2; Duarte
20 Water Company (formerly Duarte Domestic Water Company), a corpora-
21 tion; East Pasadena Water Company, Ltd., a corporation, for itself
22 and as successor by merger to California-Michigan Land and Water
23 Company, a corporation; City of El Monte, a municipal corporation;
24 City of Glendora, a municipal corporation; Glendora Irrigating
25 Company, a corporation; City of Monrovia, a municipal corporation;
26 City of Monterey Park, a municipal corporation; San Dimas Water
27 Company, a corporation, sued herein as DOE 3; San Gabriel County
28 Water District, a county water district; San Gabriel Valley Water
29 Company, a corporation; Southern California Water Company, a cor-
30 poration; City of South Pasadena, a municipal corporation; Subur-
31 ban Water Systems, a corporation; Sunny Slope Water Company, a
32 corporation; and Vallecito Water Company, a corporation; and

1 intervening defendant Upper San Gabriel Valley Municipal Water
2 District, a municipal water district (herein sometimes referred
3 to as Upper District); and intervening defendant California
4 Domestic Water Company, a corporation; stipulate and agree as
5 follows:

6 1. A Judgment in the form attached hereto as Exhibit
7 I may be made and entered by the Court in the above-entitled
8 action.

9 2. The following facts, considerations and objectives,
10 among others, provide the basis for this Stipulation for
11 Judgment:

12 (a) By their complaint plaintiffs seek a
13 determination of the rights of the defendants,
14 other than Upper District, in and to the waters
15 of the San Gabriel River System and further
16 seek to restrain defendants, other than Upper
17 District, from an alleged interference with the
18 rights of plaintiffs and persons represented by
19 Central Municipal in and to said waters.

20 (b) At the present time, and for some time
21 prior to the commencement of this action, the
22 water supply of the San Gabriel River System has
23 been inadequate to supply the diversions and
24 extractions of both plaintiffs and defendants
25 other than Central Municipal and Upper District
26 but including the persons represented by Central
27 Municipal and by Upper District, and as a result
28 said diversions and extractions have exceeded,
29 and still exceed, the natural replenishment of
30 the water supply of the San Gabriel River System.

31 (c) The parties recognize and agree that
32 the natural outflow from the San Gabriel Valley

1 to the Lower Area as defined in the Judgment has
2 varied, and will vary from year to year,
3 depending on the amount of precedent rainfall
4 and other conditions.

5 (d) The parties recognize and agree that
6 there is a need for a declaration of rights and
7 a physical solution for the problems resulting
8 from the inadequate and varying water supplies
9 of the San Gabriel River System.

10 (e) The parties agree that the physical
11 solution contained in said Judgment will bring
12 about a fair division of the water of the San
13 Gabriel River System as between plaintiffs and
14 defendants other than Central Municipal and
15 Upper District but including the persons
16 represented by Central Municipal and by Upper
17 District.

18 (f) The parties recognize that it may be
19 necessary for defendants or some of them to use
20 supplemental water in order to comply with the
21 obligations imposed under said physical solution.

22 (g) Defendant Upper District is now a
23 member unit of The Metropolitan Water District of
24 Southern California, which will be supplied with
25 water from sources in northern California under
26 an existing contract with the State of California.
27 Certain of the defendants not within the area of
28 defendant Upper District are within the area of
29 San Gabriel Valley Municipal Water District, which
30 district also has contracted with the State of
31 California for delivery of water from sources in
32 northern California. It is anticipated that the

1 importation of this water will augment the natural
2 supply of ground water within Upper Area as defined
3 in the Judgment. Defendant Upper District intends
4 to replenish the San Gabriel Valley with
5 supplemental supplies.

6 3. The parties hereto hereby waive any and all Findings
7 of Fact, Conclusions of Law, and any and all notice of the making
8 or entry herein of the attached form of Judgment, and all rights
9 of appeal, if any, from such Judgment.

10 4. Plaintiffs and defendants agree that during the
11 period prior to entry of the attached form of Judgment, they will
12 cooperate in endeavoring to collect such information as the
13 Watermaster would obtain if the attached form of Judgment had
14 been entered and the Watermaster had been appointed by the Court
15 pursuant to paragraph 6 of the Judgment, which information is
16 herein referred to as "said information." To that end, the parties
17 hereto hereby agree that promptly following the complete
18 execution of this stipulation by all parties, Upper District and
19 Central Municipal shall each notify the other in writing as to
20 the identity of the person who it expects will be nominated as
21 the representative of Upper Area Parties or Lower Area Parties,
22 as the case may be, under paragraph 6 of the Judgment. Upon
23 receiving such notice, Upper District and Central Municipal shall
24 each instruct its designated nominee that until the attached form
25 of Judgment is entered and the Watermaster has been appointed
26 pursuant to paragraph 6 of the Judgment he shall in cooperation
27 with the other designated nominee do all things reasonably
28 necessary to obtain such of said information as is available from
29 the parties hereto or any public agency.

30 5. Judgment shall not be rendered pursuant hereto
31 unless and until the execution of this stipulation by Central
32 Basin Municipal Water District and by Upper San Gabriel Valley

1 Municipal Water District shall have been validated by a decree
2 or decrees rendered in a proceeding or proceedings instituted
3 in a court of competent jurisdiction of the State of California,
4 and either such decree or decrees shall have become final or
5 both of said Districts shall have further stipulated that said
6 Judgment shall be rendered.

7 6. This stipulation may be executed in counterparts
8 (each counterpart being an exact copy or duplicate of the
9 original) and all counterparts collectively shall be considered
10 as constituting one complete Stipulation for Judgment.

11 DATED: _____, 1964.

12
13 Attorneys
14 (for the respective party
15 listed opposite and to the
16 right of the respective
17 attorneys listed below)

18 Leonard Putnam
19 City Attorney
20 Clifford E. Hayes
21 Principal Deputy City
22 Attorney
23 City of Long Beach

24 By _____

25 Burris & Lagerlof
26 Stanley C. Lagerlof
27 H. Jess Senecal
28 Jack T. Swafford

29 By _____

Signature of Stipulating Party
and Its Designation of Mailing
Address

Board of Water Commissioners of
the City of Long Beach

By _____

Its _____ President

By _____

Its _____ Secretary

1800 East Wardlow Road
Long Beach 7, California

1	Burris & Lagerlof	Central Basin Municipal Water
2	Stanley C. Lagerlof	District
3	H. Jess Senecal	
4	Jack T. Swafford	By _____
5		Its President
6		By _____
7		Its Secretary
8		7439 East Florence Avenue
9		Downey, California
10		
11	Lloyd A. Bulloch	City of Compton
12	City Attorney	
13	City of Compton	By _____
14		Its Mayor
15	Burris & Lagerlof	205 South Willowbrook Avenue
16	Stanley C. Lagerlof	Compton, California
17	H. Jess Senecal	
18	Jack T. Swafford	
19		
20		
21	Don D. Bercu	City of Alhambra
22	City Attorney	
23	City of Alhambra	By _____
24		Its Mayor
25		City Hall
26	Taylor & Smith	111 South First Street
27	By _____	Alhambra, California
28		
29		
30		
31		
32		

1	James A. Nicklin	City of Arcadia
2	City Attorney	By _____
3	City of Arcadia	Its Mayor
4	_____	City Hall
5	Surr & Hellyer	Arcadia, California
6	By _____	
7	Clayson, Stark, Rothrock	
8	& Mann	
9	By _____	
10		
11	Harry C. Williams	City of Azusa
12	City Attorney	By _____
13	City of Azusa	Its Mayor
14	_____	City Hall
15	Taylor & Smith	213 East Foothill Boulevard
16	By _____	Azusa, California
17		
18	Taylor & Smith	Azusa Agricultural Water Company
19	By _____	By _____
20		Its ____ President
21		By _____
22		Its _____ Secretary
23		18352 East Foothill Boulevard
24		Azusa, California
25	Surr & Hellyer	Azusa Valley Water Company
26	By _____	By _____
27		Its ____ President
28	Clayson, Stark, Rothrock	By _____
29	& Mann	Its _____ Secretary
30	By _____	P. O. Box "W"
31		Azusa, California
32		

1	Surr & Hellyer	Baldwin Park County Water District
2	By _____	By _____
3		Its ____ President
4	Clayson, Stark, Rothrock & Mann	By _____
5	By _____	Its _____ Secretary
6		14521 East Ramona Boulevard
7		Baldwin Park, California
8		
9	Bacigalupi, Elkus & Salinger	California Water & Telephone Company
10	By _____	By _____
11		Its ____ President
12	Surr & Hellyer	By _____
13	By _____	Its _____ Secretary
14		
15	Clayson, Stark, Rothrock & Mann	300 Montgomery Street
16	By _____	San Francisco, California
17		
18		
19	Allard, Shelton & O'Connor	Columbia Land & Water Company
20	By _____	By _____
21		Its ____ President
22	Surr & Hellyer	By _____
23	By _____	Its _____ Secretary
24	Clayson, Stark, Rothrock & Mann	P. O. Box 296
25		San Dimas, California
26	By _____	
27		
28		
29		
30		
31		
32		

1	Allard, Shelton & O'Connor	City of Covina
2	By _____	By _____
3		Its Mayor
4	Surr & Hellyer	City Hall
5	By _____	Covina, California
6	Clayson, Stark, Rothrock	
7	& Mann	
8	By _____	
9	Kerckhoff & Kerckhoff	Covina Irrigating Company
10	By _____	By _____
11	Surr & Hellyer	Its _____ President
12	By _____	By _____
13	Clayson, Stark, Rothrock	Its _____ Secretary
14	& Mann	146 East College Street
15	By _____	Covina, California
16	George C. Gillette	Cross Water Company
17	_____	By _____
18		Its _____ President
19		By _____
20		Its _____ Secretary
21		15825 East Main Street
22		La Puente, California
23	Henry W. Shatford	Duarte Water Company
24	Shatford & Shatford	By _____
25	By _____	Its _____ President
26	Surr & Hellyer	By _____
27	By _____	Its _____ Secretary
28		1101 South Oak Avenue
29	Clayson, Stark, Rothrock	Duarte, California
30	& Mann	
31	By _____	
32		

1	Gray & Maddox	East Pasadena Water Company, Ltd.
2	By _____	By _____
3		Its _____ President
4	Surr & Hellyer	By _____
5	By _____	Its _____ Secretary
6	Clayson, Stark, Rothrock	269 South Rosemead
7	& Mann	Pasadena, California
8	By _____	
9		
10	James A. Nicklin	City of El Monte
11	City Attorney	By _____
12	City of El Monte	Its Mayor
13		City Hall
14	Surr & Hellyer	El Monte, California
15	By _____	
16	Clayson, Stark, Rothrock	
17	& Mann	
18	By _____	
19		
20		
21	Leonard A. Shelton	City of Glendora
22	City Attorney	By _____
23	City of Glendora	Its Mayor
24		City Hall
25	Surr & Hellyer	Glendora, California
26	By _____	
27	Clayson, Stark, Rothrock	
28	& Mann	
29	By _____	
30		
31		
32		

1	Allard, Shelton & O'Connor	Glendora Irrigating Company
2	By _____	By _____
3		Its _____ President
4	Surr & Hellyer	
5	By _____	By _____
6		Its _____ Secretary
7	Clayson, Stark, Rothrock	224 North Michigan Avenue
8	& Mann	Glendora, California
9	By _____	
10		
11	Homer H. Bell	City of Monrovia
12	City Attorney	By _____
13	City of Monrovia	Its Mayor
14	_____	
15	Surr & Hellyer	City Hall
16	By _____	Monrovia, California
17		
18	Clayson, Stark, Rothrock	
19	& Mann	
20	By _____	
21		
22	Charles R. Martin	City of Monterey Park
23	City Attorney	By _____
24	City of Monterey Park	Its Mayor
25	_____	
26	Taylor & Smith	City Hall
27	By _____	320 West Newmark Avenue
28		Monterey Park, California
29		
30		
31		
32		

1	Allard, Shelton & O'Connor	San Dimas Water Company
2	By _____	By _____
3		Its _____ President
4	Surr & Hellyer	By _____
5	By _____	Its _____ Secretary
6	Clayson, Stark, Rothrock & Mann	P. O. Box 181 San Dimas, California
7	By _____	
8		
9		
10	Surr & Hellyer	San Gabriel County Water District
11	By _____	By _____
12		Its _____ President
13	Clayson, Stark, Rothrock & Mann	By _____
14	By _____	Its _____ Secretary
15		8229 East Las Tunas Drive San Gabriel, California
16		
17		
18	J. E. Skelton	San Gabriel Valley Water Company
19	_____	By _____
20		Its _____ President
21	Surr & Hellyer	By _____
22	By _____	Its _____ Secretary
23	Clayson, Stark, Rothrock & Mann	11142 Garvey Avenue El Monte, California
24	By _____	
25		
26		
27		
28		
29		
30		
31		
32		

1	O'Melveny & Myers	Southern California Water Company
2	By _____	By _____
3	Surr & Hellyer	Its _____ President
4	By _____	By _____
5		Its _____ Secretary
6	Clayson, Stark, Rothrock	11911 South Vermont Avenue
7	& Mann	Los Angeles 44, California
8	By _____	
9		
10	Charles R. Martin	City of South Pasadena
11	City Attorney	By _____
12	City of South Pasadena	Its Mayor
13	Surr & Hellyer	825 Mission Street
14	By _____	South Pasadena, California
15		
16	Clayson, Stark, Rothrock	
17	& Mann	
18	By _____	
19	Frank E. Gray	Suburban Water Systems
20	_____	By _____
21	Surr & Hellyer	Its _____ President
22	By _____	By _____
23		Its _____ Secretary
24	Clayson, Stark, Rothrock	16340 East Maplegrove Street
25	& Mann	La Puente, California
26	By _____	
27	Hahn & Hahn	Sunny Slope Water Company
28	By _____	By _____
29		Its _____ President
30		By _____
31		Its _____ Secretary
32		1040 El Campo Drive
		Pasadena, California

1	Surr & Hellyer	Vallecito Water Company
2	By _____	By _____
3		Its ____ President
4	Clayson, Stark, Rothrock & Mann	By _____
5	By _____	Its _____ Secretary
6		749 South Ninth Avenue
7		City of Industry, California
8		
9	Stearns, Gross and Moore	California Domestic Water Company
10	By _____	By _____
11		Its ____ President
12		By _____
13		Its _____ Secretary
14		P. O. Box 1026, Perry Annex
15		Whittier, California
16		
17	Ralph B. Helm	Upper San Gabriel Valley
18	_____	Municipal Water District
19		By _____
20		Its ____ President
21		By _____
22		Its _____ Secretary
23		11229 East Valley Boulevard
24		El Monte, California
25		
26		
27		
28		
29		
30		
31		
32		

1
2
3
4
5
6
7
8 SUPERIOR COURT OF THE STATE OF CALIFORNIA
9 FOR THE COUNTY OF LOS ANGELES
10

11 BOARD OF WATER COMMISSIONERS OF THE CITY)
12 OF LONG BEACH, a municipal corporation;)
13 CENTRAL BASIN MUNICIPAL WATER DISTRICT,)
14 a municipal water district; and CITY OF)
COMPTON, a municipal corporation,)

15 Plaintiffs,

16 vs.

NO. 722,647

17 SAN GABRIEL VALLEY WATER COMPANY, a cor-
18 poration; AZUSA AGRICULTURAL WATER
19 COMPANY, a corporation; AZUSA VALLEY
20 WATER COMPANY, a corporation; CALIFORNIA
21 WATER & TELEPHONE COMPANY, a corporation;
22 THE COLUMBIA LAND AND WATER COMPANY, a
23 corporation; COVINA IRRIGATING COMPANY, a
24 corporation; CROSS WATER COMPANY, a cor-
25 poration; DUARTE WATER COMPANY, a corpora-
26 tion; EAST PASADENA WATER CO. LTD., a
27 corporation; GLENDORA IRRIGATING COMPANY,
28 a corporation; SAN DIMAS WATER COMPANY, a
29 corporation; SOUTHERN CALIFORNIA WATER
30 COMPANY, a corporation; SUBURBAN WATER
31 SYSTEMS, a corporation; SUNNY SLOPE WATER
32 CO., a corporation; VALLECITO WATER CO.,
a corporation; CITY OF ALHAMBRA, a municip-
al corporation; CITY OF ARCADIA, a
municipal corporation; CITY OF AZUSA, a
municipal corporation; CITY OF COVINA, a
municipal corporation; CITY OF EL MONTE,
a municipal corporation; CITY OF GLENDORA,
a municipal corporation; CITY OF MONROVIA,
a municipal corporation; CITY OF MONTEREY
PARK, a municipal corporation; CITY OF
SOUTH PASADENA, a municipal corporation;
BALDWIN PARK COUNTY WATER DISTRICT, a
county water district; and SAN GABRIEL
COUNTY WATER DISTRICT, a county water
district,

Defendants,

UPPER SAN GABRIEL VALLEY MUNICIPAL WATER

JUDGMENT

1 DISTRICT, a municipal water district, and)
2 CALIFORNIA DOMESTIC WATER COMPANY, a)
3 corporation,)

4 Intervenor.)
5

6 The original complaint herein was filed by Plaintiffs on
7 May 12, 1959, and an amended complaint was filed herein on June
8 8, 1961. Each Defendant in this action filed an answer to the
9 amended complaint denying the material allegations therein. On
10 _____, 1964, and _____, 1964,
11 respectively, Upper San Gabriel Valley Municipal Water District,
12 a municipal water district, and California Domestic Water
13 Company, a corporation, intervened in the action as Defendants.
14 On _____, 1964, there was filed herein a
15 Stipulation for Judgment signed by all of the parties to this
16 action.

17 After due examination and consideration of the
18 pleadings, said Stipulation for Judgment and other documents and
19 papers on file herein, it appears to the Court that:

20 (a) In bringing and maintaining this action, plaintiff
21 Central Basin Municipal Water District, a municipal water
22 district, has done so as a representative of and for the benefit
23 of all owners of water rights within, all owners of land within,
24 and all inhabitants of, the district, except to the extent that
25 defendant California Domestic Water Company is representing
26 itself.

27 (b) In intervening in this action, defendant Upper
28 San Gabriel Valley Municipal Water District, a municipal water
29 district, has done so as representative of and for the benefit
30 of all owners of water rights within, all owners of land within,
31 and all inhabitants of, the district, except to the extent that
32 other Defendants who are within the district are representing
themselves.

1 (c) There is a need for a physical solution to the
2 complex water problems which have given rise to this action.

3 (d) The physical solution embodied in this Judgment
4 is a feasible, equitable and just resolution of the issues
5 presented by the amended complaint and answers thereto on file
6 herein, and it will bring about a fair division of the water
7 supply of the San Gabriel River System between Upper Area and
8 Lower Area, as those terms are hereinafter defined.

9 (e) On the basis of the Stipulation for Judgment filed
10 herein and the consent of all Plaintiffs and Defendants it is in
11 the interests of justice and in furtherance of the water policy
12 of the State of California to proceed without trial and to
13 make and enter this Judgment.

14 Now, therefore, it is hereby ORDERED, ADJUDGED AND
15 DECREED:

16 JURISDICTION 1. The Court has jurisdiction of the subject
17 matter of this action and of the Upper Area
18 Parties and Lower Area Parties, as those terms are
19 hereinafter defined.

20 EXHIBITS 2. The following Exhibits marked A and B, are
21 attached to this Judgment and made a part hereof:

22 (a) Exhibit A -- Map entitled "Rio Hondo and
23 San Gabriel River in Vicinity of Whittier
24 Narrows Dam".

25 (b) Exhibit B -- Engineering Appendix.

26 DEFINITIONS 3. As used in this Judgment, the following terms
27 shall have the meanings assigned to them:

28 (a) Central Municipal -- Central Basin
29 Municipal Water District.

30 (b) Upper District -- Upper San Gabriel
31 Valley Municipal Water District.

32 (c) Lower Area Parties -- the Plaintiffs, and

1 all persons, firms and corporations, public
2 or private, who are represented by Central
3 Municipal.

4 (d) Upper Area Parties -- the Defendants,
5 and all persons, firms and corporations,
6 public or private, who are represented by
7 Upper District.

8 (e) Upper Area -- the area (exclusive of the
9 Raymond Basin and the portion of San Gabriel
10 Mountains tributary thereto) wherein surface
11 and subsurface waters are tributary to
12 Whittier Narrows upstream from the common
13 boundary of Upper District and Central
14 Municipal through Whittier Narrows.

15 (f) Lower Area -- the area which lies down-
16 stream from the common boundary of Central
17 Municipal and Upper District through
18 Whittier Narrows and which is included
19 within the incorporated limits of the
20 Plaintiffs.

21 (g) Whittier Narrows -- a gap between Merced
22 Hills and Puente Hills shown on Exhibit A.

23 (h) Montebello Forebay -- the area designated
24 as such on Exhibit A.

25 (i) Export to Lower Area -- water diverted
26 from surface streams in Upper Area or pumped
27 or developed from underground sources in
28 Upper Area, and in either case conveyed by
29 conduit through Whittier Narrows.

30 (j) Subsurface Flow -- all water which passes
31 as ground water through Whittier Narrows at
32 the "narrowest section" as shown on Exhibit A.

1 (k) Surface Flow -- all water other than
2 Export to Lower Area and Subsurface Flow,
3 which passes from Upper Area to Lower Area
4 through Whittier Narrows.

5 (l) Usable Water -- all Surface Flow, Subsur-
6 face Flow and Export to Lower Area, but
7 excluding:

8 (1) that portion of Surface Flow, if any,
9 which crosses the southerly boundary of
10 Montebello Forebay as surface runoff less
11 the amount of Surface Flow which has been
12 caused to flow out of Montebello Forebay
13 as surface runoff by any spreading of
14 water in Montebello Forebay by or on behalf
15 of Lower Area Parties, or any of them;

16 (2) water imported by or on behalf of Lower
17 Area Parties from outside of the watershed
18 of the San Gabriel River System;

19 (3) Reclaimed Water, as defined in subpara-
20 graph (o) herein, provided, however, that
21 Reclaimed Water (other than that reclaimed
22 by or on behalf of Lower Area Parties)
23 which is percolated and commingled with
24 ground water in Upper Area shall be deemed
25 Subsurface Flow, Surface Flow, or Export to
26 Lower Area as the case may be, when and if
27 it passes through Whittier Narrows;

28 (4) that portion, if any, of Export to
29 Lower Area which in any Water Year after
30 September 30, 1966, exceeds 23,395 acre-
31 feet;

32 (5) Make-up Water, as defined in subpara-

graph (m) herein; and

(6) any water whether flowing on the surface or beneath the surface of the ground which has passed any of the points of surface measurement in Whittier Narrows shown on Exhibit B and prior to its passing from Upper Area to Lower Area is intercepted and returned upstream by conduit or otherwise so that it could again pass any such points of measurement.

(m) Make-up Water -- water of usable quality for ground water recharge required to be delivered to Lower Area under terms of paragraph 5 of this Judgment.

(n) Water Year -- October 1 through the following September 30.

(o) Reclaimed Water -- water reclaimed from sewage generated in the watershed of the San Gabriel River System above Whittier Narrows.

DECLARATION
OF RIGHT

4. Lower Area Parties have rights in the water supply of the San Gabriel River System. The nature and extent of such rights is not known; however, Lower Area Parties and all other persons downstream from Whittier Narrows who receive water from the San Gabriel River System or have rights in and to such water, shall have, as against Upper Area Parties and all other pumpers of water in the San Gabriel Valley, a right to receive from Upper Area an average annual usable supply of ninety-eight thousand four hundred fifteen (98,415) acre-feet of water over a long-term period of normal rainfall derived as set forth in Exhibit B, consisting

1 of Surface Flow, Subsurface Flow, Export to Lower
2 Area and Make-up Water. If in the future a court
3 of competent jurisdiction shall decree that any
4 person downstream from Whittier Narrows within
5 Central and West Basin Water Replenishment District
6 who is not bound by this Judgment, shall have, as
7 against Upper Area Parties and substantially all
8 other pumpers in the San Gabriel Valley, a right
9 to receive from Upper Area a stated amount of
10 usable supply consisting of Surface Flow, Sub-
11 surface Flow, Export to Lower Area or Make-up
12 Water, which right arose out of and is based upon
13 the ownership of land or the production of water
14 downstream from Whittier Narrows and within Central
15 and West Basin Water Replenishment District, then
16 and in that event the stated amount of such right
17 so decreed shall not increase the declared rights
18 as set forth in this paragraph 4.

19 PHYSICAL
20 SOLUTION

5. In recognition of the complexities of annual
supply and demand and variations in the components
thereof, the Court hereby declares the following
physical solution to be a fair and equitable basis
for satisfaction of the declared right set forth
in paragraph 4 hereof. Compliance with this
paragraph 5 shall constitute full and complete
satisfaction of said declared right.

27 AVERAGE
28 ANNUAL
29 ENTITLEMENT

(a) It is determined that the amount of Lower
Area average annual entitlement to Usable Water
is ninety-eight thousand four hundred fifteen
(98,415) acre-feet.

31 BASIS OF
32 ANNUAL
ENTITLEMENT

(b) The outflow of water from Upper Area
through Whittier Narrows to Lower Area has

1 varied from year to year and will vary from
2 year to year in the future depending on
3 changing conditions of supply and demand; and
4 as to any Water Year, the average annual
5 rainfall for the San Gabriel Valley during
6 the ten (10) consecutive Water Years ending
7 with that Water Year, is a reasonable basis
8 for determining the entitlement of Lower Area
9 to Usable Water for such Water Year.

10 DETERMINATION
11 OF RAINFALL

(c) The rainfall in each Water Year for the
San Gabriel Valley shall be determined by
application of the procedures described in
Exhibit B.

14 RAINFALL
15 ADJUSTMENT
16 TABLE

(d) The quantity of water which Lower Area
is entitled to receive in any Water Year
(hereinafter called Lower Area Annual Entitle-
ment) shall be determined in accordance with
the following table, except that no determina-
tion of Lower Area Annual Entitlement shall
be made for the last year of any Long-term
Accounting Period as hereinafter defined.

TABLE A
LOWER AREA ANNUAL ENTITLEMENT
BASED ON 10-YEAR AVERAGE RAINFALL
FOR SAN GABRIEL VALLEY

(In Acre-feet)

Inches of Rain- fall	0	.1	.2	.3	.4	.5	.6	.7	.8	.9
14	64,200	64,900	65,700	66,500	67,200	68,000	68,700	69,500	70,300	71,100
15	71,800	72,600	73,400	74,100	74,900	75,600	76,400	77,200	77,900	78,700
16	79,500	80,200	81,000	81,800	82,600	83,300	84,000	84,800	85,600	86,400
17	87,100	87,900	88,700	89,400	90,200	91,000	91,500	92,500	93,200	94,000
18	94,800	95,300	96,200	96,900	97,600	98,300	98,800	99,500	100,100	100,800
19	101,400	102,000	102,700	103,300	103,900	104,500	105,100	105,700	106,300	107,000
20	107,600	108,200	108,800	109,400	110,100	110,700	111,300	111,900	112,500	113,100
21	113,700	114,300	115,000	115,600	116,200	116,800	117,400	118,100	118,600	119,300
22	119,900	120,400	121,000	121,600	122,200	122,700	123,300	123,900	124,400	125,000
23	125,500	126,100	126,700	127,200	127,800	128,400	128,900	129,500	130,100	130,600
24	131,200	131,700	132,200	132,700	133,100	133,700	134,100	134,700	135,100	135,600

DETERMINATION
OF ACCRUED
DEBIT OR
CREDIT

(e) The difference between the aggregate of water entitlements determined as provided in this Judgment and the aggregate of Usable Water and delivered Make-up Water shall be computed as of the end of each Water Year. Any excess of water entitlements over the quantity of Usable Water and Make-up Water received by Lower Area after September 30, 1963, is hereinafter referred to as Accrued Debit of Upper Area. Any excess of Usable Water and Make-up Water received by Lower Area after September 30, 1963, over water entitlements, is hereinafter referred to as Accrued Credit of Upper Area.

1 ACCRUED
2 DEBIT

3 (f) If at the end of any Water Year it is
4 determined pursuant to subparagraph (e) of
5 this paragraph 5 that there is an Accrued
6 Debit of Upper Area, then Upper District shall
7 cause Make-up Water to be delivered to Lower
8 Area during the following Water Year in an
9 amount not less than the sum of (1) one-third
10 of such Accrued Debit of Upper Area, and (2)
11 that portion, if any, of such Accrued Debit
12 of Upper Area over 25,000 acre-feet which
13 remains after deducting said one-third. If
14 Upper District shall fail to deliver Make-up
15 Water as next above provided and Plaintiffs
16 shall have diligently pursued their legal and
17 equitable remedies to cause Upper District to
18 so deliver, and either: (1) it shall be finally
19 determined that Upper District is not obligated
20 to so deliver, or (2) it shall appear that
21 Upper District will not thereafter deliver
22 Make-up Water, then Defendants and any successor
23 or successors in interest by title to a Defen-
24 dant's water right in Upper Area shall be
25 obligated to so deliver Make-up Water. The
26 provisions of this paragraph are subject to
27 the provisions of paragraph 5(h) below.

28 ACCRUED
29 CREDIT

30 (g) If at the end of any Water Year it is
31 determined pursuant to subparagraph (e) of
32 this paragraph 5 that there is an Accrued
Credit of Upper Area, then there shall be no
obligation to deliver Make-up Water to Lower
Area during the following Water Year.

1 LONG-TERM
2 ACCOUNTING

3 (h) Following September 30, 1963, a Long-term
4 Accounting shall be made from time to time but
5 not sooner than at the end of 15 Water Years,
6 nor later than 25 Water Years after September
7 30, 1963, or after the last such accounting,
8 whichever is later. A Long-term Accounting
9 shall be made sooner than said 25-year period
10 whenever the average annual rainfall in the
11 San Gabriel Valley for a period of 15 Water
12 Years or more after September 30, 1963, or
13 after the last such accounting, whichever is
14 later, is at least 18 inches but not more than
15 19 inches.

16 In making such Long-term Accounting for any
17 such period (herein called Long-term
18 Accounting Period), the aggregate of all
19 Usable Water and Make-up Water received by
20 Lower Area during such period shall be deter-
21 mined and (a) there shall be deducted from said
22 aggregate the amount of Make-up Water, if any,
23 delivered during such period by reason of the
24 existence of an Accrued Debit of Upper Area
25 at the end of the immediately preceding Long-
26 term Accounting Period, or (b) there shall be
27 added to said aggregate the amount of any
28 Accrued Credit of Upper Area determined to
29 exist at the end of the immediately preceding
30 Long-term Accounting Period. The net
31 aggregate amount of Usable Water and Make-up
32 Water so computed shall be compared to the
result to be obtained by (1) multiplying the
98,415 acre-feet of water to be received by

1 Lower Area as its average annual usable supply
2 by the number of Water Years in the Long-term
3 Accounting Period, and (2) adjusting the
4 product by the percentage by which the average
5 annual rainfall (to the nearest one hundredth
6 of an inch) for the Long-term Accounting
7 Period involved exceeds or is less than 18.52
8 inches. (i.e.:

9 98,415 x (number of Water Years in
10 Period) x $\frac{\text{(average rainfall for the Period)}}{18.52}$.)

11 If as a result of such comparison it is deter-
12 mined that there is a deficiency in the net
13 aggregate amount of Usable Water and Make-up
14 Water received during the Long-term Accounting
15 Period, then such deficiency shall be compen-
16 sated in the following Water Year by delivery
17 of Make-up Water to Lower Area in the manner
18 and by the means provided herein. If it is
19 determined as a result of such comparison that
20 there is an excess of net aggregate Usable
21 Water and Make-up Water received, then the
22 amount of such excess shall be carried forward
23 as an Accrued Credit of Upper Area.

24 MAKE-UP
25 WATER
26 DELIVERY

27 (i) Make-up Water which Defendants are
28 obligated to deliver through Upper District
29 may be delivered by any one or more of the
30 following means:

31 SURFACE FLOW DELIVERY

32 (1) By causing water other than Reclaimed
Water to flow on the surface into Monte-
bello Forebay by any means and from any
source, provided that such deliveries shall

1 be at such rates or flows and at such times
2 as may be scheduled by the Watermaster.

3 RECLAIMED WATER CREDIT

4 (2) By paying to Central Municipal for
5 the benefit of all Lower Area Parties the
6 total amount or any portion of the total
7 amount which Central and West Basin Water
8 Replenishment District or any Plaintiff
9 shall have expended in reclaiming water or
10 for the purchase of Reclaimed Water in the
11 preceding Water Year, and which water when
12 so reclaimed or purchased shall have been
13 passed through Whittier Narrows to Lower
14 Area. Upon written request made by Upper
15 District not later than three months after
16 the end of a Water Year, Central Municipal
17 shall give a written notice to Upper District
18 and the Watermaster of the total number of
19 acre-feet of such Reclaimed Water so
20 reclaimed or purchased during the preceding
21 Water Year and of the cost per acre-foot
22 therefor at the existing Whittier Narrows
23 Water Reclamation Plant for reclamation of
24 waste water, and at any future additions
25 thereto, and payment therefor at said cost,
26 or costs, may be made not later than one
27 year after receipt of such written notice.
28 Such payment shall be made for the total
29 production of Reclaimed Water from the
30 existing plant in the preceding Water Year
31 before Upper District shall be entitled to
32 make payment for all, or any portion of,

1 Reclaimed Water produced in that year by
2 any future addition to that plant. Such
3 payment by Upper District on behalf of
4 Defendants shall be deemed a delivery of
5 Make-up Water equal to the quantity of
6 Reclaimed Water for which the expenditure
7 of a like sum would have paid at the cost,
8 or costs, per acre-foot so paid for such
9 Reclaimed Water. In no event, however,
10 shall any payment by Upper District under
11 this subparagraph (i)(2) be deemed a
12 delivery of Make-up Water in excess of
13 14,735 acre-feet in any Water Year during
14 which the amount of Make-up Water required
15 to be furnished by Upper Area is available
16 to it at ground water replenishment rates
17 for delivery to Lower Area, except with
18 the prior written consent of Plaintiffs.

19 DIRECT DELIVERY

20 (3) By delivering, or causing to be deli-
21 vered, water to any of Lower Area Parties
22 with consent of Plaintiffs for use in
23 Lower Area.

24 (j) It is further determined and adjudicated
25 that the obligations provided above in sub-
26 paragraphs (f) and (h) of this paragraph 5
27 for each Defendant shall constitute and be a
28 servitude upon the existing water rights of
29 each Defendant in and to the water supply of
30 the San Gabriel River System upstream from
31 Lower Area and shall run with and forever bind
32 said water rights for the benefit of the water

24 WATER
25 RIGHTS
26 BOUND

1
2 TRANSFER OF
3 WATER RIGHTS
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

rights of Lower Area Parties.

(k) If any Defendant, other than Upper District, shall desire to transfer all or any of its said water rights to a person, firm or corporation, public or private, who or which is not then bound by this Judgment as a Defendant, such Defendant shall as a condition to being discharged as hereinafter provided cause such transferee to appear in this action and file a valid and effective express assumption of the obligations imposed upon such Defendant under this Judgment as to such transferred water rights. Such appearance and assumption of obligations shall include the filing of a designation of the address to which shall be mailed all notices, requests, objections, reports and other papers permitted or required by the terms of this Judgment.

If any Defendant shall have transferred all of its said water rights and each transferee not theretofore bound by this Judgment as a Defendant shall have appeared in this action and filed a valid and effective express assumption of the obligations imposed upon such Defendant under this Judgment as to such transferred water rights, such transferring Defendant shall thereupon be discharged from all obligations hereunder. If any Defendant other than Upper District shall cease to own any rights in and to the water supply of the San Gabriel River System upstream from Lower Area, and shall have caused the appearance

1 and assumption provided for in the third
2 preceding sentence with respect to each
3 voluntary transfer, then upon application to
4 this Court and after notice and hearing such
5 Defendant shall thereupon be relieved and
6 discharged from all further obligations here-
7 under. Any such discharge of any Defendant
8 hereunder shall not impair the aggregate rights
9 of Lower Area Parties or the responsibility
10 hereunder of the remaining Defendants or any
11 of the successors.

12 WATERMASTER PROVISIONS

13 WATERMASTER
14 APPOINTMENT

15 6. A Watermaster comprised of three persons to be
16 nominated as hereinafter provided shall be appointed
17 by and serve at the pleasure of and until further
18 order of this Court. One shall be a representative
19 of Upper Area Parties nominated by and through
20 Upper District, one shall be a representative of
21 Lower Area Parties nominated by and through
22 Central Municipal, and one shall be jointly
23 nominated by Upper District and Central Municipal.
24 If a dispute arises in choosing the joint appointee,
25 the Court shall make the appointment. If Central
26 Municipal or Upper District shall at any time or
27 times nominate a substitute appointee in place
28 of the appointee last appointed to represent
29 Lower Area Parties, in the case of Central
30 Municipal, or to represent Upper Area Parties,
31 in the case of Upper District, or if Central
32 Municipal and Upper District shall at any time
or times jointly nominate a substitute appointee
in place of the joint appointee last appointed,

1 such substitute appointee shall be appointed by
2 the Court in lieu of such last appointee or joint
3 appointee. Each such nomination shall be made in
4 writing, served upon the other parties to this
5 action and filed with the Court. The Watermaster
6 when so appointed shall administer and enforce
7 the provisions of this Judgment and the instructions
8 and subsequent orders of this Court.

9 POWERS
10 AND
11 DUTIES

7. The Watermaster shall have the following powers
and duties and shall take all steps necessary to
make the following determinations for each Water
Year promptly after the end of such Water Year:

- 13 (a) the amount of Surface Flow,
- 14 (b) the amount of Subsurface Flow,
- 15 (c) the amount of Export to Lower Area,
- 16 (d) the amount of water which passed as Surface
17 Flow or Subsurface Flow across the boundary
18 between Upper Area and Lower Area through
19 Whittier Narrows and which was imported by or
20 on behalf of Lower Area Parties from outside of
21 the watershed of the San Gabriel River System
22 above Whittier Narrows,
- 23 (e) the amount and quality of Reclaimed Water
24 reclaimed by or on behalf of Lower Area,
- 25 (f) the total amount of Make-up Water delivered
26 to Lower Area, together with the respective
27 amounts delivered by each method specified in
28 paragraph 5 of this Judgment,
- 29 (g) the amount of Usable Water received by
30 Lower Area,
- 31 (h) the amount of local storm inflow,
32 originating in Lower Area, to the channel of

1 each of Rio Hondo and San Gabriel River within
2 Montebello Forebay,

3 (i) the surface outflow from Montebello
4 Forebay in the channel of each of the Rio
5 Hondo and San Gabriel River,

6 (j) the number of inches of depth of average
7 rainfall in the San Gabriel Valley,

8 (k) the average annual rainfall in the San
9 Gabriel Valley for the ten consecutive Water
10 Years just ended,

11 (l) Lower Area Annual Entitlement or the
12 entitlement for the Long-term Accounting
13 Period, determined pursuant to subparagraph
14 (d) or (h), respectively, of paragraph 5 of
15 this Judgment,

16 (m) Accrued Debit of Upper Area, if any, or
17 Accrued Credit of Upper Area, if any, as it
18 exists at the end of such Water Year, and

19 (n) the amount, if any, of Make-up Water
20 which Upper District is obligated to deliver
21 during the following Water Year.

22 DETERMINATIONS
23 TO BE BASED ON
24 EXHIBIT B

8. Each of the above required determinations shall
be based on and conform to the procedures specified
in this Judgment and in Exhibit B insofar as said
exhibit provides a procedure.

26 REPORTS
27 MEASUREMENTS
28 AND DATA

9. The Watermaster shall report to the Court and
to each party in writing at the same time and not
more than five months after the end of each Water
Year the determinations required by paragraph 7
above.

31 The Watermaster shall cause to be installed and
32 maintained in good working order such measuring

1 devices in Whittier Narrows and elsewhere as are
2 necessary or required and not otherwise available
3 for the making of the determinations required by
4 paragraph 7 above.

5 The Watermaster shall collect and assemble
6 from each of the parties, and the parties shall
7 make available to the Watermaster, such records,
8 reports and other data as may reasonably be
9 required in the making of the determinations
10 required of the Watermaster under paragraph 7 above.
11 All records, reports and data received, maintained
12 or compiled by the Watermaster shall be open to
13 inspection by any party or its representative.

14 OBJECTIONS

15 10. Any party who objects to any determination
16 made by the Watermaster pursuant to paragraph 7
17 above, may make such objection in writing to the
18 Watermaster within thirty (30) days after the
19 Watermaster gives the required written notice of
20 such determination. Within thirty (30) days after
21 expiration of the time within which objection may
22 be made to such determination, the Watermaster
23 shall consider all objections thereto and shall
24 amend, modify or affirm the determination and
25 give notice thereof at the same time to all parties
26 and shall file a copy of such final determination
27 with the Court. If the Watermaster denies any
28 objection in whole or in part, the party whose
29 objection was so denied may within thirty (30)
30 days after service of the final determination
31 upon it, make written objection to such denial
32 by filing its objections with the Court after first
mailing a copy of such objections to the

1 Watermaster and to each party, and such party shall
2 bring its objections on for hearing before the
3 Court upon notice and motion and at such time as
4 the Court may direct. If the Watermaster shall
5 change or modify any determination, then any party
6 may within fifteen (15) days after service of such
7 final determination upon it object to such change
8 or modification by following the procedure
9 prescribed above in the case of a denial of an
10 objection to the first determination. If objection
11 to a final determination is filed with the Court
12 as herein provided and brought on for hearing,
13 then such final determination may be confirmed or
14 modified in whole or in part as the Court may deem
15 proper.

16 CHANGE IN
17 METHOD OF
18 MEASUREMENT

11. If the Watermaster shall deem it advisable to
make a change in the method of making any measure-
ment required under the terms of this Judgment,
the Watermaster shall notify all parties of such
proposed change, and if within sixty (60) days of
such notification no party shall file written
objections to such change with the Watermaster,
the Watermaster may put such proposed change into
effect. If, however, any party files its written
objection to the proposed change, it shall by
notice of motion filed not later than fifteen
(15) days after the expiration of said 60-day
period and served on the Watermaster and all parties
bring its objection on for hearing before the Court
at such time as the Court may direct, and the
Court shall rule on whether the Watermaster may
make such proposed change.

BUDGET

12. In addition to the above-specified administrative powers and duties, the Watermaster shall prepare a tentative budget for each Water Year, stating the estimated expense for discharging the duties of the Watermaster set forth in this Judgment. The Watermaster shall mail a copy of the tentative budget to each of the parties at the same time at least sixty (60) days before the beginning of each Water Year. However, with respect to the first Water Year following the entry of this Judgment, the tentative budget shall be mailed not later than one hundred and twenty (120) days from the entry of this Judgment. If any party has an objection to a tentative budget, or any suggestions with respect thereto, that party shall present the same in writing to the Watermaster within fifteen (15) days after service of the tentative budget upon it. If no objections are received, the tentative budget shall become the final budget. If objections to the tentative budget are received, the Watermaster shall, within fifteen (15) days after the expiration of the time for presenting objections, consider all such objections, prepare a final budget, and mail a copy thereof to each party, together with a statement of the amount assessed, if any, to each party, computed as provided in paragraph 13. If the Watermaster denies any objection in whole or in part, the party whose objection was so denied may, within fifteen (15) days after service of the final budget upon it, make written objection to such denial by filing

1 its objections with the Court after first
2 mailing a copy of such objections to each
3 party, and such party shall bring its objections
4 on for hearing before the Court upon notice and
5 motion and at such time as the Court may direct.
6 If the Watermaster makes a change in the tentative
7 budget, then any party may within fifteen (15)
8 days after service of the final budget upon it
9 object to any such change by following the
10 procedure prescribed above in the case of a denial
11 of an objection to the tentative budget. If
12 objection to the final budget is filed with the
13 Court as herein provided and brought on for
14 hearing, then such final budget may be confirmed
15 or adjusted in whole or part as the Court may deem
16 proper.

17 FEEES AND
18 EXPENSES

19 13. The fees, compensation and expenses of the
20 Watermaster hereunder shall be borne by the parties
21 in the following proportions: 50% by Upper
22 District, 41.2% by Central Municipal, 7.125% by
23 the City of Long Beach, and 1.675% by the City of
24 Compton, or such other division among the Plaintiffs
25 as they may agree upon in writing and file with
26 the Watermaster.

27 Payment of the amount assessed to a party,
28 whether or not subject to adjustment by the Court
29 as provided in paragraph 12, shall be paid on or
30 prior to the beginning of the Water Year to which
31 the final budget and statement of assessed costs
32 is applicable. If such payment by any party is
not made on or before said date, the Watermaster
shall add a penalty of 5% thereof to such party's

1 statement. Payment required of any party here-
2 under may be enforced by execution issued out of
3 this Court, or as may be provided by order here-
4 inafter made by this Court. All such payments
5 and penalties received by the Watermaster shall
6 be expended by him for the administration of this
7 Judgment. Any money remaining at the end of any
8 Water Year shall be available for use in the
9 following Water Year.

10 SUCCESSOR
11 OF UPPER
12 DISTRICT

13 14. If a public agency or district shall be
14 formed hereafter which shall include the present
15 area of Upper District and shall have ability
16 equal to or greater than that which Upper District
17 now has to perform the obligations under this
18 Judgment, and shall appear in this action and
19 file a valid and effective assumption of such
20 obligations, then Upper District upon application
21 to this Court, and after notice and hearing, shall
22 thereupon be relieved and discharged from all
23 further obligations hereunder.

24 CONTINUING
25 JURISDICTION
26 OF THE COURT

27 15. Full jurisdiction, power and authority is
28 retained and reserved by the Court for the purpose
29 of enabling the Court upon application of any
30 party by motion and upon at least thirty (30)
31 days notice thereof, and after hearing thereon
32 (i) to make such further or supplemental orders
or directions as may be necessary or appropriate
for the construction, enforcement or carrying out
of this Judgment, and (ii) to modify, amend or
amplify any of the provisions of this Judgment
whenever substantial developments affecting the
physical, hydrological or other conditions dealt

1 with herein may, in the Court's opinion, justify
2 or require such modification, amendment or
3 amplification.

4 If at any time Plaintiffs and at least two-
5 thirds of the Defendants including any two of the
6 cities of Alhambra, Azusa and Monterey Park, shall
7 file with the Court a written stipulation (i) that
8 henceforth in determining any one or more of the
9 component parts of Usable Water received by Lower
10 Area in any Water Year, the Watermaster shall not
11 use the method specified in this Judgment but
12 shall use instead a new, different or altered
13 method as specified and described in such
14 stipulation, and (ii) that such new, different or
15 altered method or methods shall be applied to
16 redetermine the average annual amount of Usable
17 Surface Flow, Subsurface Flow and Export to Lower
18 Area which Lower Area received each Water Year
19 during the period October 1, 1934 to September
20 30, 1959, referred to as the base period, and
21 that on the basis of such redetermination the
22 Court may modify paragraphs 4 and 5 of this
23 Judgment to establish a new and different water
24 entitlement and yearly adjustment thereto which
25 shall thereafter control, then and in that event,
26 after hearing pursuant to motion and notice to
27 all parties, held at such time as the Court may
28 direct, the Court may deny the motion or it may
29 grant it and (a) approve the future use of the
30 stipulated new, different or altered method or
31 methods, by the Watermaster, and (b) by use of the
32 stipulated new, different or altered method or

1
2
3
4
5
6
7
8
9
10
11 REPORT OF
12 TRANSFER
13 OF WATER
14 RIGHTS
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

methods, redetermine the average annual amount of Usable Surface Flow, Subsurface Flow and Export to Lower Area received each Water Year during the base period, and on the basis thereof modify paragraphs 4 and 5 of this Judgment to provide for a new and different water entitlement and yearly adjustment thereto, which modifications shall be effective and control commencing with the Water Year following the entry of the order so modifying paragraphs 4 and 5.

16. Every transfer of any of those water rights of Defendants which are the subject of Paragraph 5(j) of this Judgment, whether such transfer is voluntary or involuntary, shall be reported promptly in writing by the transferor to the Watermaster; and the Watermaster shall give prompt written notice of such transfer to each party and to each transferee involved in every other transfer of any of those water rights. Such report by the transferor and notice by the Watermaster shall contain the following information as to each such transfer:

- (a) The identity of the transferor;
- (b) The identity of the transferee;
- (c) The effective date of the transfer;
- (d) A brief description of the document by which such transfer is made, and the recording data, if any;
- (e) A statement as to whether the transfer was voluntary or involuntary;
- (f) A statement whether or not after such transfer the transferor still has or

claims to have any of the water rights
which are the subject of Paragraph 5(j)
of this Judgment.

NOTICES

17. All notices, requests, objections, reports
and other papers permitted or required by the
terms of this Judgment shall be given or made by
written document and shall be served by mail on
each party and on each transferee of water rights
who has appeared and filed the assumption of
obligations required by paragraph 5(k) of this
Judgment, and where required or appropriate, on
the Watermaster. For all purposes of this
paragraph the mailing address of each party shall
be that set forth below its signature to the
Stipulation for Judgment, and the mailing address
of each transferee of water rights shall be that
set forth in the appearance and assumption of
obligations required by paragraph 5(k) of this
Judgment, until changed as provided below. No
further notice of any kind as to any matter
arising hereunder, including notice to attorneys
of record for any party or such transferee, need
be given, made or served.

If any party or any such transferee of water
rights shall desire to change its designation of
mailing address, it shall file a written notice
of such change with the clerk of this court and
shall serve a copy thereof by mail on the
Watermaster. Upon the receipt of any such notice
the Watermaster shall promptly give written
notice thereof to each party and to each
transferee of water rights.

1 EFFECTIVE
2 DATE

18. The rights decreed and the obligations
imposed by this Judgment shall be effective
October 1, 1963, and shall accrue from that
date.

5 COSTS

19. None of the parties shall recover any costs
from any other party.

8 Dated: _____, 1964.

11 _____
12 Judge

1

2

3

4

5

6

7

8

9

10

11

12

LONG BEACH v. SAN GABRIEL

13

14

15

16

ENGINEERING APPENDIX

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

EXHIBIT B

ENGINEERING APPENDIX

Table of Contents

	<u>Page No.</u>
Introduction	1
I. Derivation of Lower Area Average Annual Entitlement	1
A. Usable Surface Flow	1
B. Subsurface Flow	4
C. Export to Lower Area	6
D. Derivation of Lower Area Average Annual Entitlement	8
II. Determination of Future Lower Area Annual Entitlement	8
III. Future Measurements	10
A. Surface Water Measurements and Calculations	10
B. Subsurface Flow	13
C. Export to Lower Area	17
IV. Accounting	18
A. Components of Usable Water	18
1. Surface Flow	18
2. Subsurface Flow	19
3. Export to Lower Area	19
B. Calculation of Usable Water	19
C. Determination and Delivery of Make-up Water	21
D. Long-term Accounting	23
E. Water Usable for Ground Water Replenishment	23

Tables

<u>Table No.</u>	<u>Title</u>	<u>Page No.</u>
1	Calculation of Usable Surface Flow Received by Lower Area	3
2	Subsurface Flow	5
3	Export to Lower Area	7
4	Lower Area Average Annual Entitlement	8
5	Annual Rainfall for San Gabriel Valley	9
6	Rainfall-Runoff Relationship of Sycamore Canyon	13

1 ENGINEERING APPENDIX

2
3 INTRODUCTION

4 Pursuant to the declaration of rights contained in
5 paragraph 4 of the Judgment and the physical solution
6 contained in paragraph 5 of the Judgment, the purpose of this
7 exhibit is to establish the basis for calculations and
8 measurements to provide for operation of the Judgment in the
9 future.

10 Unless otherwise provided in this exhibit, all terms
11 used herein are used in the same sense as defined or used in
12 the Judgment.

13 The derivation of the Lower Area average annual
14 entitlement is based upon the data presented herein covering
15 the base period. However, if a more accurate method of
16 determining Subsurface Flow is developed at some future time,
17 it will be acceptable for use in carrying out the terms of this
18 Judgment so long as it can also apply to the base period and to
19 the years over which the Judgment shall have operated to that
20 time.

21
22 I. DERIVATION OF LOWER AREA AVERAGE ANNUAL ENTITLEMENT

23 The Lower Area average annual entitlement is
24 stipulated in paragraph 5 (a) of the Judgment to be 98,415
25 acre-feet. It was derived from three components of water
26 supply over the base period, October 1, 1934, through
27 September 30, 1959. Said components were: (1) Usable Surface
28 Flow, (2) Subsurface Flow, and (3) Export to Lower Area.

29
30 A. Usable Surface Flow

31 For the base period, Usable Surface Flow was
32 calculated as that portion of Surface Flow which percolated

in Montebello Forebay, less the calculated amounts of Lower Area Replenishment Water (hereby defined as water imported from outside of the watershed of the San Gabriel River system by or on behalf of Lower Area Parties for replenishment of Montebello Forebay and passing from Upper Area to Lower Area), and less one-half of the Raymond Basin sewage discharged in Upper Area from the Tri-City Sewage Treatment Plant.

Table 1 presents the calculation of Usable Surface Flow during the base period. The average annual quantity was calculated to be 51,620 acre-feet. Its derivation is summarized in the following tabulation.

		Average annual quantity in acre- feet
1. Surface Flow		108,560
2. Montebello Forebay surface outflow	45,000	
3. Local storm inflow within Montebello Forebay	<u>1,660</u>	
4. Portion of Surface Flow leaving Montebello Forebay (2 minus 3)		43,340
5. Surface Flow percolated in Montebello Forebay (1 minus 4)		65,220
6. Lower Area Replenishment Water (Colorado River water) passing through Whittier Narrows	11,870	
7. One-half of Raymond Basin sewage discharged in Upper Area	1,730	
8. Usable Surface Flow (5 minus 6 minus 7)		51,620

TABLE
OF US.
G BASE
acre-Feet

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Water Year	Hondo -64	Rio H. Bypass F-3	Camero Canyon	abriel at num g water	11 +5+6)	Montebello San Gabri o River F-26	total (8+9)	Bello Drain 81	low -11)	low of face low -11)	use Flow plated in Montebello Canyon (7-12)	Colorado water pa nitric N	One- Basin s in	Raymond Discharge Area	Usable face 11 (13-14-15)
1934-35	9,230		390	2,410	170	4,1	10,700	150	9,050	52,120					7,470
31	0,700		70	6,140	720	1,1	5,970	190	5,080	41,640					1,905
32	0,900		260	7,750	750	21,1	47,870	70	5,700	64,050					1,185
33	9,330		510	9,120	660	60,1	132,100	150	0,050	103,610					1,650
34	0,650		200	8,380	560	2,1	12,080	80	1,100	74,460					1,490
1939-40	7,660		110	9,510	490	1,1	6,750	90	5,860	67,630					1,645
41	0,650		1,070	2,440	280	75,1	169,040	90	4,950	97,330					1,125
42	8,810		80	3,770	400	13,1	20,300	60	9,340	72,060					1,920
43	9,470		150	2,670	700	186,1	128,330	80	5,750	73,950					1,715
44	1,390		220	1,420	880	79,1	106,750	90	4,360	87,520					1,975
1944-45	2,300		70	7,130	520	26,1	34,570	70	3,800	73,720					1,230
46	3,160		70	1,580	440	16,1	27,760	70	6,890	83,550					1,915
47	8,410		110	6,790	540	27,1	43,680	50	2,350	77,210					1,425
48	5,370		20	0,970	030		3,510	10	2,600	56,430					1,365
49	1,100		40	3,590	370		1,490	160	630	34,740					1,740
1949-50	2,280		110	1,780	950		2,840	40	1,600	31,350					1,350
51	7,880		0	8,420	000		780	90	-110	23,110					1,110
52	4,570		530	6,800	990	24,2	50,290	30	6,960	51,030					1,030
53	6,120		50	2,350	730	1	4,430	30	3,000	41,730					1,730
54	3,390	7,2	100	8,130	430	3,7	14,550	90	2,360	40,070		15,61			1,380
1954-55	1,350	9,7	70	4,630	880	1,1	9,000	10	7,790	31,090		23,11			1,960
56	6,180	14,9	150	8,930	560	10,1	24,900	10	2,790	39,770		42,81			1,100
57	6,840	20,4	50	2,220	350	1,3	6,030	20	4,910	56,440		51,81			1,570
58	9,320	15,3	540	1,320	140	23,1	54,220	50	0,970	78,170		103,91			1,270
1958-59	9,800		10	9,790	520	3,1	7,030	30	5,800	77,720		59,31			1,330
TOTAL	6,860	67,6	4,980	8,040	060	586,1	124,970	10	3,560	30,500		296,81			1,385
Average	3,870	2,7	200	1,120	560	23,1	45,000	60	3,340	65,220		11,07			1,620

1 B. Subsurface Flow

2 The State of California, Department of Water
3 Resources, published in April 1962, Appendix B, "Safe Yield
4 Determinations", of Bulletin No. 104, a report entitled "Planned
5 Utilization of the Ground Water Basins of the Coastal Plain of
6 Los Angeles County". That report included estimates of the
7 seasonal Subsurface Flow through Whittier Narrows for each Water
8 Year during the period 1934-35 through 1956-57. By applying
9 the same methods of computation, the estimates have been
10 extended through the Water Year 1958-59 and a 25-year average
11 of 28,400 acre-feet derived.

12 Table 2 sets out the Subsurface Flow for each Water
13 Year in the base period and the average annual Subsurface Flow
14 during the base period.
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

TABLE 2
SUBSURFACE FLOW
DURING BASE PERIOD

	<u>Water Year</u>	<u>Acre-Feet</u>
5	1934-35	33,500
6	36	33,500
7	37	31,100
8	38	25,600
9	39	25,000
10	1939-40	23,900
11	41	23,300
12	42	21,800
13	43	21,900
14	44	23,700
15	1944-45	23,500
16	46	23,100
17	47	22,400
18	48	25,700
19	49	30,300
20	1949-50	34,000
21	51	32,800
22	52	32,100
23	53	32,800
24	54	33,200
25	1954-55	33,600
26	56	32,200
27	57	32,600
28	58	30,500
29	1958-59	<u>27,800</u>
30	TOTAL	709,900
31	Average	28,400

1 C. Export to Lower Area

2 During the base period there were a number of water
3 producers or water service agencies which produced water by
4 surface diversions or wells in Upper Area and exported it to
5 Lower Area. At the present time, and for the past several
6 years, all such water has been pumped from wells in Upper Area.

7 There are four water service agencies which
8 currently so export water. They are the Rincon Ditch Company,
9 California Domestic Water Company, Suburban Water Systems, and
10 the City of Whittier.

11 Table 3 sets forth Export to Lower Area for each
12 Water Year during the base period and the average annual Export
13 to Lower Area during the base period.
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

TABLE 3
EXPORT TO LOWER AREA
DURING BASE PERIOD

<u>Water Year</u>	<u>Acre-Feet</u>
1934-35	15,049
35-36	21,644
36-37	22,668
37-38	25,151
38-39	27,532
1939-40	22,566
40-41	24,191
41-42	27,514
42-43	30,484
43-44	31,182
1944-45	25,953
45-46	27,456
46-47	29,877
47-48	30,165
48-49	25,515
1949-50	18,363
50-51	21,651
51-52	16,302
52-53	18,141
53-54	18,360
1954-55	18,796
55-56	20,728
56-57	19,686
57-58	22,031
58-59	23,881
TOTAL	584,886
Average	23,395

1 D. Derivation of Lower Area Average Annual Entitlement

2 Table 4 presents the derivation of the Lower Area
3 average annual entitlement.

4
5 TABLE 4
6 LOWER AREA AVERAGE ANNUAL ENTITLEMENT
7 (In acre-feet for base period)
8

9

Usable Surface Flow (Table 1)	51,620
Subsurface Flow (Table 2)	28,400
Export to Lower Area (Table 3)	<u>23,395</u>
Sub-total	103,415
Stipulated deduction	<u>5,000</u>
Lower Area average annual entitlement	98,415

10
11
12
13
14
15

16 II. DETERMINATION OF FUTURE LOWER AREA ANNUAL ENTITLEMENT

17 In determining a future Lower Area Annual Entitlement,
18 as set forth in paragraph 5 (d) of the Judgment, the annual
19 rainfall for San Gabriel Valley shall be determined in
20 accordance with procedures set forth below, which are those
21 presently utilized by the Los Angeles County Flood Control
22 District. The 90-year (1872-73 through 1961-62) average
23 rainfall for San Gabriel Valley has been calculated by said
24 District to be eighteen and fifty-two one-hundredths (18.52)
25 inches. For purposes of this Judgment, this quantity shall
26 be the long-term average annual rainfall for San Gabriel Valley
27 and shall not be subject to change.

28 The arithmetic average of the annual rainfall
29 recorded at the four precipitation stations listed below shall
30 constitute the rainfall for San Gabriel Valley for the
31 respective Water Year.
32

<u>Station No.</u>	<u>Location</u>
95	114 East First Street, San Dimas
102C	19711 East Valley Blvd., Walnut
108C	119 South Hoyt Avenue, El Monte
610B	City Hall, Pasadena

Table 5 presents the annual rainfall for San Gabriel Valley for the Water Years 1954-55 through 1962-63.

TABLE 5
ANNUAL RAINFALL FOR SAN GABRIEL VALLEY

<u>Water Year</u>	<u>Rainfall, Inches</u>
1954-55	13.9
56	16.7
57	13.7
58	30.2
59	8.5
1959-60	10.6
61	5.9
62	22.4
63	12.3

The average rainfall in inches for the ten (10) consecutive Water Years ending with the year for which entitlement is being calculated shall be used as the basis for determining Lower Area Annual Entitlement.

Lower Area Annual Entitlements have been computed for 10-year average rainfall in increments of one-tenth (0.1) inch between fourteen (14) and twenty-five (25) inches and are set forth in Table A in paragraph 5 (d) of the Judgment. The following outlines the procedure for determining Lower Area Annual Entitlement from Table A:

- (1) Derive the 10-year average rainfall for San Gabriel Valley to the nearest one-tenth (0.1) inch;
- (2) Enter Table A in left-hand column at whole number of inches of rainfall; and

1 (3) Read horizontally to the vertical column
2 representing the appropriate tenth of
3 an inch of rainfall to obtain the
4 quantity of Lower Area Annual Entitlement
5 in acre-feet.
6

7 III. FUTURE MEASUREMENTS

8 It will be necessary to maintain records of measurement
9 of stream flow, flow in pipelines, rainfall and depth to ground
10 water at a number of locations. The purpose of this Part III is
11 to locate and identify those measurement stations and to specify
12 the manner in which the measurements are to be used in the future
13 operation of the Judgment. The line through Whittier Narrows
14 shown on Exhibit A as "narrowest section" is the line at which
15 accounting shall be made of the water to be received in the
16 future by Lower Area Parties. The Watermaster shall, insofar as
17 practicable, utilize measurement data available from existing
18 sources. When such data are not available the Watermaster may
19 make such measurements as may be necessary or reasonably required
20 for the purposes of this Judgment. The Watermaster is hereby
21 authorized to re-establish, rebuild or replace measuring
22 stations whenever necessary for the operation of this Judgment.
23

24 A. Surface Water Measurements and Calculations.

25 There may be several categories of water flowing on
26 the surface through Whittier Narrows. Among them may be local
27 stream flow, Lower Area Replenishment Water, Reclaimed Water
28 and Make-up Water. The Watermaster shall have the responsibility
29 of determining the quantities of each category of water flowing
30 through Whittier Narrows in the future.
31

32 The approximate locations of stream measuring stations
in and near Whittier Narrows are shown on Exhibit A. The surface

1 water measurements and calculations shall include the following:

2 1. Measurements of Surface Flow.

3 a. Rio Hondo above Mission Bridge,
4 Station F64-R.

5 b. Mission Creek at San Gabriel
6 Boulevard, Station F83-R.

7 c. Rio Hondo By-pass Channel,
8 Station F313-R.

9 d. Whittier Narrows Flood Channel,
10 Station E337-R.

11 e. Calculation of Sycamore Canyon runoff
12 based on annual rainfall to nearest
13 inch at Station 170-C as shown on
14 Table 6.

15 f. San Gabriel River near Parkway Bridge.
16 This is to be a new station to replace
17 the existing station on San Gabriel
18 River at Beverly Boulevard, Station
19 F263B-R.

20 g. The portion of Reclaimed Water from
21 Whittier Narrows Reclamation Plant
22 diverted to Rio Hondo.

23 2. Measurement of local storm inflow to the channel
24 of each of the Rio Hondo and San Gabriel River
25 within Montebello Forebay.

26 a. Montebello storm drain, Station F181-R.

27 b. Calculation of unmeasured local storm
28 inflow.

29 3. Measurements of diversions to spreading grounds
30 Montebello Forebay.

31 4. Measurement of surface outflow from Montebello
32 Forebay in the channel of each of Rio Hondo and

San Gabriel River.

a. Rio Hondo above Stewart and Gray
Road, Station F45B-R.

b. San Gabriel River at Florence
Avenue, Station F262-R.

5. Measurement of Lower Area Replenishment Water
imported to Upper Area from outside the water-
shed of the San Gabriel River system.

a. Rio Hondo By-pass Channel,
Station F313-R.

b. San Gabriel By-pass Channel,
Station F314-R.

c. San Gabriel River MWD Outlet,
Station M335-R.

d. Alhambra Wash MWD Outlet,
Station M340-R.

e. Any other measuring point or points
in Upper Area at which such replen-
ishment water is released.

6. Measurement of total Reclaimed Water from Whittier
Narrows Reclamation Plant reclaimed by or on
behalf of Lower Area Parties.

In the event that any of the aforementioned gaging
stations are inoperative for any reason and for any period of
time the Watermaster shall estimate the quantity that would
have been measured at the station had it been operative. The
estimate shall be based on correlation to nearby operative
measuring stations or on other reasonable engineering methods.

TABLE 6

RAINFALL - RUNOFF RELATIONSHIP OF SYCAMORE CANYON*

Annual rainfall, in inches at Precipitation Station No. 170-C	Estimated runoff in acre-feet
6	5
7	10
8	15
9	25
10	35
11	45
12	60
13	75
14	90
15	105
16	125
17	145
18	170
19	200
20	240
21	275
22	315
23	355
24	400
25	445
26	490
27	535
28	580
29	630
30	685

Extrapolate for rainfall values in excess of 30 inches.

* Located on Westerly side of Whittier Narrows, upstream from dam and downstream from stream gaging Station F64-R. Approximate drainage area is 2.77 square miles.

B. Subsurface Flow

The determination of Subsurface Flow involves certain measurements and procedures which are set forth in this section. In connection with a recent comprehensive study made by the State of California, Department of Water Resources, for Bulletin No. 104, "Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County", estimates were made of Subsurface Flow through Whittier Narrows. The State concluded that a reasonable method of determining Subsurface Flow was by the transmissibility method, which is based on Darcy's Law applied

1 at the location shown on Exhibit A as "narrowest section".

2 Darcy's Law states that $Q = PIA$, in which

3 $Q =$ Subsurface Flow

4 $P =$ Permeability, in gallons per day per
5 square foot under unit hydraulic gradient

6 $I =$ Slope of water table

7 $A =$ Cross-sectional area

8 Under this Judgment calculations shall be made by the
9 Watermaster for the spring and fall of each year and because of
10 slight variations due to the nature of the data available,
11 Subsurface Flow for any one year will be equal to the tri-annual
12 average of the quantities calculated for the three years ending
13 with the year of calculation. In this manner, annual Subsurface
14 Flow shall be based on the average of six calculations, the
15 first of which shall be the spring of 1962.

16 The elevation of the ground surface at the "narrowest
17 section" of Whittier Narrows is deemed to be 208 feet above
18 sea level, and the width of the section is deemed to be 7,900
19 feet. Water levels fluctuate at Whittier Narrows and the
20 cross-sectional area of the ground water at Whittier Narrows
21 will vary with fluctuations in ground water elevation.

22 It should be noted that $T = PD$, where $T =$
23 transmissibility in gallons per day per foot of width under
24 unit hydraulic gradient and $D =$ saturated depth in feet.
25 Therefore $PA = TW$ and $Q = PAI = TWI$. The product TW (or PA)
26 for the entire cross-sectional area was determined to be
27 $4,739.5 \times 1,000,000$ gallons per day, or 7,333.6 cfs. The
28 actual slope of the water table, I , would then be applied to
29 the calculated quantity of TW (or PA).

30 The average permeability of the material to a depth
31 of 100 feet below the ground surface has been determined to
32 be equal to 2,000 gallons per day per square foot, which is

1 equal to .003095 cubic feet per second per square foot. This
2 represents the average permeability in the zone of water level
3 fluctuation.

4 In order to correct for the unsaturated depth, the
5 equation $Q = TWI$ is modified to $Q = (TW - C)I$ where

6 $C = P_1 W d,$

7 C = The flow which would occur in the unsaturated
8 section if it were saturated, in cubic feet
per second under unit hydraulic gradient.

9 P_1 = Average permeability for a distance of 100
10 feet below the ground surface.

11 W = The cross-sectional width, or 7,900 feet.

12 d = The distance from the water surface to the
13 top of the ground, or 208 feet minus ground
water elevation.

14 Utilizing the values of permeability shown above, then

15 $C = 24.45 d$, in cubic feet per second, for values
16 of " d " to a depth of 100 feet below the
ground surface.

17 The "effective transmissibility" is equal to the total
18 transmissibility times the width at the narrowest section minus
19 C , or,

20 $Tw_e = TW - C$

21 $Tw_e = 7,334 - C$, in cubic feet per second.

22 Subsurface Flow is equal to the effective transmissi-
23 bility times the average slope of the water table. The formula
24 derived from the foregoing, may be stated as follows:

25 $Q = 724 I [7,334 - 24.45 (208 - E)]$

26 Where: Q = Subsurface Flow in acre-feet per year,

27 I = Average adjusted slope of ground water
28 surface at narrowest section, and

29 E = Ground water elevation of the water
30 surface in feet above sea level at the
narrowest cross-section.

31 The detailed steps to be carried out by the Watermaster
32 are as follows:

1 (1) Ground water level contour maps in the vicinity of Whittier
2 Narrows are drawn on the basis of water level measurements.

3 (2) A line representing the narrowest cross-section is drawn on
4 the ground water contour maps.

5 (3) This line is subdivided into four equal lengths.

6 (4) The average slope of the water table at each of the three
7 points within the narrowest section is determined along a line
8 perpendicular to the ground water contours in the manner hereto-
9 fore used by the State of California, Department of Water
10 Resources.

11 (5) Adjustment is made to the ground water slope at each of the
12 three points so that it is perpendicular to the narrowest section
13 by:

14 (a) measuring the angle, in degrees, between the
15 line representing the narrowest cross-section and
16 the tangent to the flow line at the narrowest
17 cross-section,

18 (b) applying the sine of that angle to the previously
19 determined slope to determine the adjusted slope, and

20 (c) obtaining an average of the three adjusted slopes
21 to represent the average slope through the narrowest
22 cross-section.

23 (6) The elevation of the water surface at the narrowest cross-
24 section is determined by interpolating between the ground water
25 contours.

26 (7) The distance to the ground water surface is computed from
27 the top of the ground by the formula: $d = 208 - E$, where E
28 represents the average water level elevation of the narrowest
29 cross-section, in feet.

30 (8) The correction factors for the transmissibility for the
31 area from the top of ground to the water surface is computed by
32 the formula $C = 24.45 d$, in cubic feet per second.

1 (9) The effective transmissibility is computed by the formula
2 $T_{we} = 7,334 - C$, in cubic feet per second.

3 (10) Subsurface Flow is computed by multiplying the effective
4 transmissibility by the average adjusted slope.

5 (11) The computed Subsurface Flow, in cubic feet per second,
6 is converted to acre-feet per year by multiplying it by 724.

7 The selected wells within the vicinity of Whittier
8 Narrows which have been used for drawing the ground water
9 contours are as follows:

10	<u>Location No.</u>	<u>State No.</u>
11	2927B	2S 11W 06M01S
12	2927D	06K01S
13	2928	07B01S
14	2936	06A01S
15	2936A	1S 11W 31J03S
16	2938A	2S 11W 07H1S
17	2938D	05N05S
18	2939	08N01S
19	2939B	18B01S
20	2939G	07R01S
21	2947C	-
22	2947F	05L01S
23	2947N	05P01S
24	2948	05N04S
25	2948E	08B02S
26	2948F	08L03S
27	2957H	-

28 The Watermaster shall obtain measurements of ground
29 water elevations in the spring and fall of each year when they
30 are at their approximate high and low levels, respectively.
31 Such measurements may be made at, but need not be limited to,
32 all of the above listed wells.

28 C. Export to Lower Area

29 If present measuring devices on existing conduits are
30 inadequate, the Watermaster shall install or cause to be
31 installed adequate measuring devices to determine the amount of
32 Export to Lower Area.

1 IV. ACCOUNTING

2 Utilizing the appropriate measurements described in
3 the previous portion of this Exhibit B, the Watermaster shall
4 maintain accounts for the determination of Lower Area Annual
5 Entitlement, the annual amount of Usable Water, Make-up Water
6 to be delivered, Make-up Water received, the annual total amount
7 of Usable Water and Make-up Water, the accumulated Lower Area
8 Annual Entitlements, the accumulated amounts of Usable Water and
9 Make-up Water received subsequent to September 30, 1963, Accrued
10 Debit of Upper Area or Accrued Credit of Upper Area, and records
11 necessary for accomplishing the Long-term Accounting.

12 In maintaining the accounting records listed above,
13 the Watermaster shall establish the necessary accounting
14 procedures to accomplish the recordation of data and required
15 calculations for accomplishment of the provisions set forth in
16 paragraph 5 of the Judgment.

17
18 A. Components of Usable Water

19 1. Surface Flow. Surface Flow shall be measured as
20 set forth in Part III.A. of this exhibit to include all water
21 other than Export to Lower Area and Subsurface Flow which passes
22 from Upper Area to Lower Area through Whittier Narrows. When
23 the new station to be constructed on the San Gabriel River near
24 Parkway Bridge is completed, it shall replace the gaging station
25 on the San Gabriel River at Beverly Boulevard, Station F263B-R.
26 Until such new station is in operation, Surface Flow as
27 measured at Station F263B-R shall be increased by the amount
28 of Surface Flow which has percolated or been diverted between
29 Station F263B-R and the point of maximum rising water. The
30 Watermaster shall determine the quantity so percolated or
31 diverted based upon available measurements by the Los Angeles
32 County Flood Control District.

2. Subsurface Flow. Subsurface Flow shall be calculated in accordance with the procedures heretofore set forth.

3. Export to Lower Area. The Watermaster shall reduce to acre-feet the meter readings on each of the conduits transporting through Whittier Narrows water diverted from surface streams in Upper Area or pumped or developed from underground sources in Upper Area. These quantities shall be used to determine Export to Lower Area except that after September 30, 1966, Export to Lower Area used for determination of Usable Water shall not exceed 23,395 acre-feet per year. (Paragraph 3(1) of this Judgment.)

B. Calculation of Usable Water

After determining the amounts of Surface Flow, Subsurface Flow and Export to Lower Area during a Water Year, as provided above, the Watermaster, in order to determine the extent to which such water constitutes the receipt of Usable Water by Lower Area during such Water Year, shall deduct from the total of such amounts, the following:

1. Lower Area Replenishment Water. An amount equal to the total quantity of Lower Area Replenishment Water released in Upper Area in each Water Year subsequent to September 30, 1963, less such amount, if any, as the Watermaster determines to be lost due to evaporation or transpiration prior to the receipt of such water in Lower Area;

2. Reclaimed Water. An amount equal to the total quantity of Reclaimed Water which is reclaimed by or on behalf of Lower Area Parties;

3. Make-up Water. An amount equal to the quantity of Make-up Water delivered to Lower Area during such Water Year, calculated as hereafter provided, to the extent included in

1 Surface Flow or Export to Lower Area;

2 4. Paragraph 3(1)(6) Water. An amount equal to the
3 quantity of any water which falls within the scope of paragraph
4 3(1)(6) of the Judgment; and

5 5. Unusable Surface Flow. An amount equal to the
6 quantity of Unusable Surface Flow, which is determined by
7 deducting from the total outflow as measured at Stations F45B-R
8 and F262-R: (1) Local Storm Outflow and (2) the portion of
9 Surface Flow which has been caused to pass said stations by
10 reason of any spreading of water in Montebello Forebay by or on
11 behalf of Lower Area Parties.

12 Local Storm Outflow is a portion of local storm inflow
13 originating in Montebello Forebay upstream from said measuring
14 stations, the amount of which outflow is to be determined as
15 hereinafter provided. When actual measurements of local storm
16 inflow are not available, the amount thereof discharging to the
17 channels of Rio Hondo or San Gabriel River within Montebello
18 Forebay upstream from stations F45B-R and F262-R shall be
19 estimated by correlation with the local storm inflow measured
20 at Montebello Storm Drain, Station F181-R. Such quantities shall
21 be estimated on the basis of the individual drainage areas of
22 storm drain projects and the runoff per unit area determined
23 from the Montebello Storm Drain, Station F181-R, during the
24 particular time interval under consideration. When water is
25 flowing out of Montebello Forebay on the surface in the Rio Hondo
26 or San Gabriel River channels, the Watermaster shall determine
27 Local Storm Outflow as follows:

28 a. Local Storm Outflow from Rio Hondo. When outflow
29 occurs at Station F45B-R, all local storm inflow, both measured
30 and estimated, which enters the Rio Hondo channel between that
31 station and Upper Area shall constitute Local Storm Outflow from
32 Rio Hondo, but the amount thereof shall not exceed the amount of

1 outflow at Station F45B-R for such periods.

2 b. Local Storm Outflow from San Gabriel River. At
3 such times as local storm inflow does not join Surface Flow in
4 San Gabriel River, the portion of such local storm inflow passing
5 Station F262-R shall constitute Local Storm Outflow. In addition,
6 at such times as Surface Flow in the San Gabriel River commingles
7 with the local storm inflow, then the Watermaster shall determine
8 Local Storm Outflow as follows:

9 (1) Calculate the total amount of local
10 storm inflow to the San Gabriel River during
11 such times, but such amount to be used in the
12 determination of Local Storm Outflow shall not
13 exceed the amount of San Gabriel River outflow
14 passing Station F262-R during such periods.

15 (2) Calculate the Local Storm Outflow
16 passing Station F262-R during such times, which
17 calculation shall be based on the Surface Flow
18 and local storm inflow to the San Gabriel River
19 channel, giving appropriate weight to the
20 quantities involved and the distance the
21 respective quantities of water traverse
22 Montebello Forebay in said channel.

23 (3) These two calculations shall then be
24 averaged arithmetically and the resulting amount
25 shall be Local Storm Outflow from San Gabriel
26 River.

27
28 C. Determination and Delivery of Make-up Water

29 1. By Additions to Surface Flow (paragraph 5(i)(1) of
30 Judgment). The determination of the amount of Make-up Water
31 which is delivered to Lower Area as an addition to Surface Flow
32 shall be based upon (a) measurements of Make-up Water at the

1 delivery outlet of such water upstream from Whittier Narrows,
2 (b) measurements of water consisting in whole or in part of
3 Make-up Water passing the applicable stations listed in Part
4 III.A.1. of this Exhibit B, and (c) such deductions from the
5 measurements of Make-up Water at said stations so listed as are
6 necessary to take into account (i) the amount of any water other
7 than Make-up Water included in the measurements at said stations
8 so listed, (ii) any losses due to evaporation or transpiration
9 of Make-up Water after such measurement and prior to its receipt
10 in Lower Area, and (iii) any percolation of Make-up Water after
11 such measurement and prior to the time it reaches the "narrowest
12 section" in Whittier Narrows.

13 As changing conditions may require, the Watermaster
14 shall change the points of measurement of Make-up Water in order
15 to obtain those measurements necessary to determine the amount
16 of Make-up Water delivered to Lower Area Parties by means of
17 increasing Surface Flow.

18 2. By Payment for Reclaimed Water (paragraph 5(i)(2)
19 of the Judgment). The Watermaster shall determine (a) the
20 quantity of Reclaimed Water reclaimed at the Whittier Narrows
21 Water Reclamation Plant as it existed October 1, 1963, and which
22 when so reclaimed shall have been passed through Whittier
23 Narrows, and (b) the quantity, if any, of Reclaimed Water
24 reclaimed at any future additions to said plant after September
25 30, 1963, and which when so reclaimed shall have been passed
26 through Whittier Narrows. Such quantities shall be ascertained
27 from the records of Los Angeles County Flood Control District.

28 Upon being advised that a payment has been made by
29 Upper District or Defendants to Central Municipal pursuant to
30 the provisions of paragraph 5(i)(2) of the Judgment, the
31 Watermaster shall credit Upper Area Parties with the delivery of
32 Make-up Water computed according to said paragraph of the

1 Judgment.

2 3. By Deliveries to a Lower Area Party (paragraph
3 5(i)(3) of the Judgment). Any Make-up Water delivered directly
4 to a Lower Area Party with the consent of Plaintiffs shall be
5 metered and the meter records reduced to acre-feet per year.
6 Upon being advised that a Lower Area Party has received a direct
7 delivery of Make-up Water pursuant to the provisions of paragraph
8 5(i)(3) of the Judgment, the Watermaster shall credit Upper Area
9 Parties with delivery of such Make-up Water in the Water Year in
10 which it was so delivered.

11
12 D. Long-term Accounting

13 The Watermaster shall maintain a record of the annual
14 rainfall in the San Gabriel Valley, including a running average
15 of such rainfall, so that the Watermaster will be informed when
16 a Long-term Accounting shall be carried out as specified in
17 paragraph 5(h) of the Judgment, and shall thereafter perform
18 the necessary calculations for accomplishment of the adjust-
19 ment, if any, between the aggregate amount of water received
20 compared to the aggregate entitlement for the period.

21
22 E. Water Usable for Ground Water Replenishment

23 With respect to any delivery of Make-up Water the
24 Watermaster shall determine the suitability of such water for
25 ground water replenishment. The Watermaster shall gather,
26 insofar as readily available from public and private agencies,
27 data relating to the quality of all categories of water,
28 Surface Flow, Subsurface Flow, Export to Lower Area, Reclaimed
29 Water, Lower Area Replenishment Water and Make-up Water.
30
31
32

REIMBURSEMENT CONTRACT

LONG BEACH v. SAN GABRIEL

d.

REIMBURSEMENT CONTRACT

<u>Contents</u>	<u>Page</u>
RECITALS	1
1. The Action	1
2. Judgment	1
3. Public Interest in Settlement	2
DEFINITIONS	2
1. "Contract Costs"	2
2. "Assessable Pumpage"	3
3. Common Terms With Judgment	3
OPERATIVE PROVISIONS	3
1. Consideration for Execution	3
2. Intervention by Upper District	4
3. Administration	4
4. Covenant to Reimburse	4
5. Allocation of Costs Among Pumpers	5
6. Reports by Pumpers	5
(a) Time and Procedure for Filing	5
(b) Contents of the Report	5
(c) Determination in Lieu of Report	6
7. Notice of Assessment	6
8. Payment--Delinquency and Default	6
9. Redetermination of Assessable Pumpage	7
(a) Notice of Request for Redetermination	7
(b) Availability of Records	8
(c) Investigation and Notice of Hearing	8
(d) Conduct of Hearing and Decision	8
(e) Reallocation of Contract Costs	9
10. Water Rights Unaffected	9
11. Changed Conditions	9
(a) Allocation of Portion of Burden to Taxes	10
(b) Imposition of Pump Tax	10
(c) Adjudication of Rights	10
12. Effective Date	11
13. Validation	11
14. Term	11
15. Notices	12
16. Additional Parties	12
17. Successors and Assigns	14
18. Execution in Counterparts	15

ed.

REIMBURSEMENT CONTRACT

THIS CONTRACT is made by and between UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT, herein called "Upper District", and the cities of ALHAMBRA, ARCADIA, AZUSA, COVINA, EL MONTE, GLENDORA, MONTEREY PARK, MONROVIA, SOUTH PASADENA, and WHITTIER; BALDWIN PARK COUNTY WATER DISTRICT, and SAN GABRIEL COUNTY WATER DISTRICT; AZUSA AGRICULTURAL WATER COMPANY, AZUSA VALLEY WATER COMPANY, CALIFORNIA DOMESTIC WATER COMPANY, CALIFORNIA WATER & TELEPHONE COMPANY, COLUMBIA LAND AND WATER COMPANY, COVINA IRRIGATING COMPANY, CROSS WATER COMPANY, DUARTE WATER COMPANY, EAST PASADENA WATER COMPANY, LTD., GLENDORA IRRIGATING COMPANY, SAN DIMAS WATER COMPANY, SAN GABRIEL VALLEY WATER COMPANY, SOUTHERN CALIFORNIA WATER COMPANY, SUBURBAN WATER SYSTEMS, SUNNYSLOPE WATER COMPANY, and VALLECITO WATER COMPANY, corporations, herein collectively called "Pumpers."

ed.

RECITALS

1. The Action. In the matter of Board of Water Commissioners of the City of Long Beach, et al. v. San Gabriel Valley Water Company, et al., (L. A. Superior Court No. 722,647) the water rights of substantially all major water producers in the main San Gabriel Valley are sought to be restricted.

2. Judgment. The parties named above, except City

of Whittier, are concurrently executing a Stipulation that a Judgment substantially in the form annexed hereto shall be rendered and it is anticipated that such Judgment will be rendered in the action.

3. Public Interest in Settlement. It is in the best interests of the Pumpers and in the best interests of the water users and taxpayers within the corporate boundaries of those Pumpers which are public agencies, of the consumers of those Pumpers which are utilities or mutual water companies, and of all residents and taxpayers of Upper District, that said action be settled and disposed of in accordance with the terms of said judgment in order to preserve the water supplies within Upper Area.

DEFINITIONS

1. "Contract Costs" -- All costs hereafter paid by Upper District:

ed.

(a) In providing Make-up Water under the terms of the judgment. In computing such cost of providing Make-up Water, any cost which Upper District shall pay which it would have paid even though it had not provided Make-up Water shall be excluded; and particularly but not exclusively, no amount which shall be paid to The Metropolitan Water District of Southern California as a condition to any past or future annexation shall be

deemed a cost of providing Make-up Water. Such costs may include interest paid by Upper District upon money borrowed for advancements made by it or interest which would have been received by the District, but which it lost by reason of making such advancements.

(b) In complying with the terms of said judgment.

(c) In keeping the records, making the determinations and collecting the moneys required by the later provisions of this contract.

2. "Assessable Pumpage" -- The amount of ground water produced in the applicable calendar year by or on behalf of any Pumper by pumping or extraction thereof from the Upper Area, including ground water produced under rights hereafter acquired from any source.

3. Common Terms With Judgment -- All terms specially defined in said judgment are used herein in the sense in which they are therein defined, and said special definitions are incorporated herein by this reference.

OPERATIVE PROVISIONS

1. Consideration for Execution. The great majority of the defendants in the action are situated in whole or in part within Upper District and pump water therein. Certain defendants, including the Cities of Alhambra, Azusa and

Monterey Park, as well as the City of Whittier which is not a defendant, lie outside Upper District. Execution of this agreement by all parties to it is essential to induce each party hereto to execute this agreement, and likewise, execution of the Stipulation for Judgment by all defendants in the action is necessary to induce each party hereto to execute this contract. Each party executes this contract in consideration of its execution by the other parties, and in consideration of the execution of the Stipulation by the parties thereto. Moreover, by this contract each party other than City of Whittier waives its right to cross-complain in the action so as to bring City of Whittier into the action as a party.

2. Intervention by Upper District. In consideration of the execution of this contract by Pumpers and to contribute to the physical solution of providing adequate ed. water for its inhabitants, Upper District has intervened as a defendant in the action and agrees to execute the stipulation for said judgment.

3. Administration. Upper District shall administer the provisions of Paragraphs 6 through 9, below, as to all Pumpers, including additional parties hereto mentioned in Paragraph 16.

4. Covenant to Reimburse. Each Pumper hereby agrees to pay to Upper District such Pumper's share of Contract

Costs allocated and determined as provided below.

5. Allocation of Costs Among Pumpers. Pumpers agree among themselves, each for the benefit of all other Pumpers, to share and participate in the payment of any sums due Upper District hereunder in such proportion as the Assessable Pumpage of each Pumper bears to the total Assessable Pumpage of all Pumpers for the applicable period covered by any assessment as hereinafter provided, subject to the provisions of Paragraph 9 below.

6. Reports by Pumpers. Pumpers shall file under penalty of perjury the reports hereinafter specified in the form provided by Upper District, as follows:

(a) Time and Procedure for Filing. Each year, on or before March 1, each Pumper shall file with Upper District a written report of its extractions of water from Upper Area for the preceding calendar year containing the information set forth in subparagraph (b) of this paragraph.

(b) Contents of the Report. Such annual reports to Upper District shall set forth:

(1) The name and address of the Pumper;
and

(2) The number of acre feet of water which was pumped or extracted from Upper Area by or on behalf of the Pumper during

the calendar year covered.

(c) Determination in Lieu of Report. In the event any Pumper fails to so file such report, Upper District may make a determination of the Assessable Pumpage of such Pumper, which determination shall be final and binding.

7. Notice of Assessment. On or before June 1 of each year, Upper District shall serve a Notice of Assessment on each Pumper covering the preceding calendar year which will contain a statement of:

(a) The amount of Assessable Pumpage by each Pumper;

(b) A detailed statement of Contract Costs during the preceding calendar year, if any; and

(c) A statement of the amount of such Contract Costs which are assessable to and payable by the Pumper to whom such notice is sent.

ed.

8. Payment--Delinquency and Default. All assessments herein provided for shall be due and payable on the following July 31. In the event of nonpayment of any assessment, Upper District may bring an action and shall have the right to recover such assessment, together with interest thereon at the rate of 7% per annum from the date of delinquency and costs of suit, including any reasonable attorneys' fees incurred.

If, after due diligence, Upper District is unable to collect a Pumper's allocated cost, such uncollectible amount (including interest, costs and attorneys' fees) shall be prorated among and paid by the other Pumpers in the same proportions as they paid assessments for the year or years in question. Said proration shall be billed and payable with the next succeeding assessment.

9. Redetermination of Assessable Pumpage. Any Pumper may at any time within 90 days after receipt of any Notice of Assessment request a redetermination of the Assessable Pumpage of such Pumper or of any other Pumper or Pumpers reflected in such notice. Such request shall be addressed in writing to Upper District and shall set forth the basis of the requesting Pumper's belief that such data are incorrect. Upon the receipt of any request, the following procedures shall be undertaken by Upper District:

(a) Notice of Request for Redetermination.

Upper District shall forthwith notify in writing any Pumper whose Assessable Pumpage has been questioned, of the fact of such request and the name of the requesting Pumper. Notice shall further be sent to all Pumpers that procedures will be undertaken pursuant to this paragraph, and shall state briefly the issues to be determined.

(b) Availability of Records. Subsequent to such notice, the records of the Pumper whose Assessable Pumpage is subject to a request for redetermination shall be made available at reasonable hours and upon reasonable demand to Upper District, insofar as such records are relevant to a determination of the Assessable Pumpage of the Pumper during the period involved.

(c) Investigation and Notice of Hearing. Upper District shall conduct an investigation and shall by written decision served on all Pumpers redetermine or affirm such Assessable Pumpage. Upper District may at its option set a date for hearing. In such event, at least ten days' notice in writing of said hearing date shall be given to all Pumpers.

ed.

(d) Conduct of Hearing and Decision. If hearing be held, Upper District shall not be bound therein by strict rules of evidence, but may rely on any evidence which it deems of probative value. Any Pumper may present evidence and arguments thereat. The written decision of Upper District, with or without such hearing, shall be served on all Pumpers and shall be conclusive for purposes of this contract, unless said issue is submitted

to a court of competent jurisdiction within 90 days from notice of such decision.

(e) Reallocation of Contract Costs. If Assessable Pumpage is modified by any such decision, Contract Costs shall be reallocated in accordance therewith. Said reallocation shall be billed and payable with the next succeeding assessment.

10. Water Rights Unaffected. This contract relates solely to the equitable allocation of Contract Costs and does not involve or constitute an admission or agreement as to the water rights of any Pumper. Execution of this contract shall not prevent any party hereto from bringing or maintaining any action or proceeding to determine rights to pump, extract or store water, or to limit or curtail any pumping, extraction or storage of water in or from Upper Area or elsewhere, except as limited by Paragraphs 1 and 16 of the Operative Provisions hereof.

ed.

11. Changed Conditions. It is recognized that conditions in Upper Area may hereafter change to such an extent that it may become equitable to modify either the total obligation of Pumpers to Upper District hereunder or the allocation of Contract Costs. While this contract is entered into to assure Upper District of reimbursement of an amount up to its entire Contract Costs, it is not intended hereby, and this contract shall not be deemed, to prevent Upper District

from modifying and reducing such obligation or from applying other relief which may reduce the burden on Pumpers. Without limitation upon the power of Upper District to otherwise reduce the aggregate amount payable under this contract, the following specific instances of changed conditions are contemplated:

(a) Allocation of Portion of Burden to Taxes.

It may at some future date appear equitable and fair to allocate all or a portion of Contract Costs to ad valorem taxes or other revenues of Upper District. In such event, Upper District may, in the discretion of its Board of Directors, allocate all or a portion of Contract Costs to such revenue sources and the remainder, if any, thereof, shall be payable under the terms of this contract.

ed. (b) Imposition of Pump Tax. If Upper District should acquire and exercise the right to levy a tax upon the pumping or extraction of ground water, then the aggregate of such tax shall be credited proportionally amongst Pumpers with respect to Assessable Pumpage within Upper District.

(c) Adjudication of Rights. If all or substantially all of the water rights within Upper Area shall be adjudicated (including the rights of all Pumpers), and its natural and safe yield

determined, then this contract shall be deemed modified to the extent that Assessable Pumpage shall include only that amount of water produced over and above the safe yield portion of adjudicated rights owned by any Pumper; provided that this subparagraph (c) shall not apply to any year in which the aggregate of all Assessable Pumpage as so modified is less than 25,000 acre feet.

12. Effective Date. This contract shall be effective ten (10) days after notice in writing of execution thereof by all parties, which notice shall be given to all Pumpers by Upper District, but shall cease and terminate on July 1, 1966, unless by said date (a) this contract shall have been validated as provided below, and (b) the Judgment shall have been rendered.

ed. 13. Validation. Within four months after this contract becomes effective, a proceeding or proceedings shall be instituted by Upper District in a court of competent jurisdiction by an appropriate action or actions for determination of the validity of this contract.

14. Term. The term of this contract shall commence upon its effective date and continue so long as the Judgment, as entered or as modified, shall remain in effect, subject, however, to the provisions of Paragraph 12 above.

15. Notices. Any notice to be served upon any party hereunder may be served either personally or by mail. If served by mail, such notice shall be mailed in the County of Los Angeles, State of California, by certified mail, postage prepaid, return receipt requested, or by registered mail, and shall be addressed to the party to be served at its address as set forth below, or (in the case of Upper District) at such other address as it may have last specified in writing to the Pumper or Pumpers involved for the service of notices hereunder, or (in the case of a Pumper) at such other address as it may have last specified in writing to Upper District for the service of notices hereunder. Any notice so served by mail shall be deemed to have been served upon the first business day (excluding Saturdays, Sundays and holidays) after such mailing.

ed.

16. Additional Parties. In addition to Pumpers and their successors and assigns referred to in Paragraph 17 below, any other person or entity who or which shall pump or extract water in or from Upper Area (herein referred to as an "additional party"), may become a party to this contract, provided (a) Upper District shall give its written consent thereto, and (b) no Pumper or additional party shall serve upon Upper District its written objection thereto. If Upper District shall give its written consent to execution of this contract by an applying additional party, it shall

then give written notice of such application and consent by Upper District to each Pumper and each additional party, and if within thirty (30) days after such notice no Pumper or additional party shall have served upon Upper District its written objection to execution of this contract by the applying additional party, such additional party's application shall be deemed to have been accepted and it may become a party to this contract by delivery to Upper District of a duly executed instrument in writing stating that such person or entity joins in and becomes a party to this contract.

Any additional party so joining shall become bound by all obligations of this contract, becoming due or which should be performed within the terms of this contract on and after the ensuing January 1. Such obligations include the duty to make the report of extractions during the preceding calendar year (i.e., the year in which the contract is executed) required by Paragraph 6, and to make the payment based upon such extractions as required by Paragraph 5, provided, however, that such additional party shall have no liability under Paragraph 8 with respect to any nonpayments of an assessment based upon extractions by a Pumper or other additional party prior to the year in which such additional party joins in this contract.

As to each Pumper who executes this contract after it becomes effective, Upper District agrees that for a

period of 90 days after giving its said written consent, it will bring no action against such additional party to limit or define its rights to pump water in or from Upper Area. Further, if more than one such Pumper shall become a party to this agreement at the same time as any other pumper, each will execute and shall be deemed to have executed this contract and to have joined therein in consideration of the joinder in this contract by the other or others concurrently joining in this contract.

Any such additional party shall be deemed a Pumper for all purposes of this agreement.

17. Successors and Assigns. This contract shall inure to the benefit of and bind the successors in ownership of the water rights of the parties. If any Pumper shall sell or transfer or agree to sell or transfer its water rights in Upper Area or any part of such water rights, such Pumper shall require as a condition of any such sale, transfer or agreement that the purchaser or transferee, if not already a party to this contract, shall execute this contract and become a party thereto. Upon a full transfer of such rights by a Pumper and assumption by the assignee as above provided, the assigning Pumper shall be discharged of obligation hereunder. If such Pumper fails to obtain such assumption (except in cases of a transfer under order of court or by operation of law) the assigning Pumper shall

remain bound by the contract and production of water by said assignee by the exercise of the right assigned shall be treated as production by such Pumper.

18. Execution in Counterparts. This contract may be executed in counterparts (each counterpart being an exact copy or duplicate of the original) and all counterparts collectively shall be considered as constituting one complete contract.

IN WITNESS WHEREOF this contract is executed by the undersigned by its duly authorized officer.

Dated: _____.

(SEAL)

By _____

By _____

ed.

APPENDIX D

Main San Gabriel Basin Adjudication

**SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF LOS ANGELES**

**UPPER SAN GABRIEL VALLEY
MUNICIPAL WATER DISTRICT**

Plaintiff,

vs.

CITY OF ALHAMBRA, et al,

Defendants.

No. 924128

**AMENDED JUDGMENT
(and Exhibits Thereto),**

**Honorable Florence T. Pickard
Assigned Judge Presiding**

**Original Judgment
Signed and Filed: December 29, 1972;
Entered: January 4, 1973
Book 6741, Page 197**

JUDGMENT AS AMENDED AUGUST 24, 1989

1 Ralph B. Helm
2 Suite 214
3 4605 Lankershim Boulevard
4 North Hollywood, CA 91602
5 Telephone (818) 769-2002

6 Attorney for Watermaster

7
8 SUPERIOR COURT OF CALIFORNIA, COUNTY OF LOS ANGELES
9

10 UPPER SAN GABRIEL VALLEY)
11 MUNICIPAL WATER DISTRICT,)
12 Plaintiff,)
13 vs.)
14 CITY OF ALHAMBRA, et al.,)
15 Defendants.)
16

No. 924128

AMENDED JUDGMENT

(And Exhibits Thereto)

17
18
19
20
21
22
23
24
25 HONORABLE FLORENCE T. PICKARD

26 Assigned Judge Presiding

27 DEPARTMENT 38

28 August 24, 1989

AMENDED JUDGMENT
TABLE OF CONTENTS

And
Amended Judgment Sections
Identified With Prior Judgment
Section Numbers

	<u>Page</u>
I. INTRODUCTION.	1
1. Pleadings, Parties and Jurisdiction	1
2. Stipulation for Entry of Judgment	2
3. <u>Lis Pendens</u> . .(New).	2
4. Findings and Conclusions . .(Prior 3).	2
5. Judgment . .(New).	2
6. Intervention After Judgment . .(New).	2
7. Amendments to Judgment . .(New).	3
8. Transfers . .(New).	3
9. Producers and Their Designees . .(New).	3
10. Definitions . .(Prior 4).	3
(a) Base Annual Diversion Right	3
(b) Direct Use	3
(c) Divert or Diverting	3
(d) Diverter	4
(e) Elevation	4
(f) Fiscal Year	4
(g) Ground Water	4
(h) Ground Water Basin	4
(i) Integrated Producer	4
(j) In-Lieu Water Cost	4
(k) Key Well	4
(l) Long Beach Case	4
(m) Main San Gabriel Basin or Basin	4

1	(n) Make-up Obligation	5
2	(o) Minimal Producer	5
3	(p) Natural Safe Yield	5
4	(q) Operating Safe Yield	5
5	(r) Overdraft	5
6	(s) Overlying Rights. . .(Prior (r) [1]). . . .	5
7	(t) Physical Solution . .(Prior (s)).	5
8	(u) Prescriptive Pumping Right . .(Prior (t)).	5
9	(v) Produce or Producing . .(Prior (u)). . . .	6
10	(w) Producer . .(Prior (v)).	6
11	(x) Production . .(Prior (w)).	6
12	(y) Pump or Pumping . .(Prior (x)).	6
13	(z) Pumper . .(Prior (y)).	6
14	(aa) Pumper's Share . .(Prior (z)).	6
15	(bb) Relevant Watershed . .(Prior (aa))	6
16	(cc) Replacement Water . .(Prior (bb))	6
17	(dd) Responsible Agency . .(Prior (cc))	7
18	(1) Upper District	7
19	(2) San Gabriel District	7
20	(3) Three Valleys District	7
21	(ee) Stored Water . .(Prior (dd))	7
22	(ff) Supplemental Water . .(Prior (ee))	7
23	(gg) Transporting Parties . .(Prior (ff)) . . .	7
24	(hh) Water Level . .(Prior (gg))	8
25	(ii) Year . .(Prior (hh))	8
26	11. Exhibits . .(Prior 5).	8
27	II. DECREE	9
28	A. DECLARATION OF HYDROLOGIC CONDITIONS.	9

1	12. Basin as Common Source of Supply .(Prior 6). . .	9
2	13. Determination of Natural Safe Yield .(Prior 7). .	10
3	14. Existence of Overdraft. .(Prior 8).	10
4	B. DECLARATION OF RIGHTS	10
5	15. Prescription . .(Prior 9).	10
6	(a) Prior Prescription	10
7	(b) Mutual Prescription.	10
8	(c) Common Ownership of Safe Yield and	
9	Incidents Thereto	11
10	16. Surface Rights . .(Prior 10)	11
11	17. Ground Water Rights . .(Prior 11)	11
12	18. Optional Integrated Production Rights (Prior 12).	12
13	19. Special Category Rights . .(Prior 13)	12
14	20. Non-consumptive Practices . .(Prior 14)	12
15	21. Overlying Rights . .(Prior 14.5)	13
16	C. INJUNCTION	14
17	22. Injunction Against Unauthorized	
18	Production . .(Prior 15)	14
19	23. Injunction re Non-consumptive Uses. (Prior 16). .	15
20	24. Injunction Against Changing Overlying	
21	Use Without Notice to Watermaster (Prior 16.5). .	15
22	25. Injunction Against Unauthorized Recharge (Prior 17)	15
23	26. Injunction Against Transportation From	
24	Basin or Relevant Watershed . .(Prior 18) .	15
25	D. CONTINUING JURISDICTION	16
26	27. Jurisdiction Reserved . .(Prior 19)	16
27	E. WATERMASTER.	17
28	28. Watermaster to Administer Judgment .(Prior 20) .	17

1	29. Qualification, Nomination and Appointment	
2	(Prior 21).	17
3	(a) Qualification	17
4	(b) Nomination of Producer Representatives	17
5	(c) Nomination of Public Representatives.	18
6	(d) Appointment	18
7	30. Term and Vacancies . .(Prior 22)	18
8	31. Quorum . .(Prior 23)	18
9	32. Compensation . .(Prior 24)	19
10	33. Organization . .(Prior 25)	19
11	(a) Minutes.	19
12	(b) Regular Meetings	20
13	(c) Special Meetings	20
14	(d) Adjournments	20
15	34. Powers and Duties . .(Prior 26)	21
16	(a) Rules and Regulations.	21
17	(b) Acquisition of Facilities.	21
18	(c) Employment of Experts and Agents	21
19	(d) Measuring Devices, etc.	21
20	(e) Assessments.	22
21	(f) Investment of Funds.	22
22	(g) Borrowing.	22
23	(h) Purchase of and Recharge With	
24	Supplemental Water	22
25	(i) Contracts.	22
26	(j) Cooperation With Existing Agencies	22
27	(k) Assumption of Make-up Obligation	23
28	(m) Water Quality.	23

1	(n) Cyclic Storage Agreements.	23
2	(o) Notice List.	24
3	35. Policy Decisions -- Procedure. .(Prior (27)). . .	24
4	36. Reports. .(Prior 28)	25
5	37. Review Procedures . .(Prior 29)	25
6	(a) Effective Date of Watermaster Action. . . .	25
7	(b) Notice of Motion.	25
8	(c) Time For Motion	26
9	(d) De Novo Nature of Proceeding.	26
10	(e) Decision.	26
11	F. PHYSICAL SOLUTION.	26
12	38. Purpose and Objective . .(Prior 30)	26
13	39. Need for Flexibility. .(Prior 31)	26
14	40. Watermaster Control . .(Prior 32)	27
15	41. General Pattern of Contemplated Operation	
16	(Prior 33).	27
17	42. Basin Operating Criteria. .(Prior 34)	28
18	43. Determination of Operating Safe Yield (Prior 35). .	28
19	(a) Preliminary Determination	28
20	(b) Notice and Hearing.	29
21	(c) Watermaster Determination and Review	
22	Thereof	29
23	44. Reports of Pumping and Diversion. .(Prior 36). .	29
24	45. Assessments -- Purpose. .(Prior 37)	30
25	(a) Watermaster Administration Costs	30
26	(b) Replacement Water Costs	30
27	(c) Make-up Obligation.	31
28	(d) In-Lieu Water Cost.	31

1	(e) Basin Water Quality Improvement	31
2	46. Assessments -- Procedure . .(Prior 38)	32
3	(a) Levy and Notice of Assessment.	32
4	(b) Payment	32
5	(c) Delinquency	33
6	47. Availability of Supplemental Water From	
7	Responsible Agency . .(Prior 39).	33
8	48. Accumulation of Replacement Water Assessment	
9	Proceeds. . (Prior 40)	33
10	49. Carry-over of Unused Rights . .(Prior 41)	34
11	50. Minimal Producers . .(Prior 42)	34
12	51. Effective Date. .(Prior 43).	34
13	G. MISCELLANEOUS PROVISIONS	35
14	52. Puente Narrows Flow . .(Prior 44).	35
15	53. San Gabriel District -- Interim Order (Prior 45) .	35
16	54. Service Upon and Delivery to Parties of Various	
17	Papers . .(Prior 46)	36
18	55. Assignment, Transfer, etc., of Rights (Prior 47) .	37
19	56. Abandonment of Rights . .(Prior 48).	37
20	57. Intervention After Judgment . .(Prior 49). . . .	38
21	58. Judgment Binding on Successors, etc., (Prior 50) .	38
22	59. Water Rights Permits. (Prior 51).	39
23	60. Costs . .(Prior 52).	39
24	61. Entry of Judgment . .(New)	39

EXHIBITS

27	"A" -- Map entitled "San Gabriel River Watershed
28	Tributary to Whittier Narrows"

1	<u>Exhibits Continued</u>
2	"B" -- Boundaries of Relevant Watershed
3	"C" -- Table Showing Base Annual Diversion Rights
4	of Certain Diverters
5	"D" -- Table Showing Rights and Pumper's Share of Each Pumper
6	"E" -- Table Showing Production Rights of Each
7	Integrated Producer
8	"F" -- Table Showing Special Category Rights
9	"G" -- Table Showing Non-consumptive Users
10	"H" -- Watermaster Operating Criteria
11	"J" -- Puente Narrows Agreement
12	"K" -- Overlying Rights
13	"L" -- List of Producers and Their Designees (New)
14	"M" -- Watermaster Members, Officers, and Staff Including
15	Calendar Year 1989 (New)
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	

1 Ralph B. Helm
Suite 214
2 4605 Lankershim Boulevard
North Hollywood, CA 91602
3 Telephone (818) 769-2002
4 Attorney for Watermaster
5
6
7

8 SUPERIOR COURT OF CALIFORNIA, COUNTY OF LOS ANGELES
9

10	UPPER SAN GABRIEL VALLEY)	
11	MUNICIPAL WATER DISTRICT,	)	No. 924128
)	
12	Plaintiff,	)	AMENDED JUDGMENT
)	
13	vs.)	
)	
14	CITY OF ALHAMBRA, et al.,)	
)	
15	Defendants.	)	Hearing: August 24, 1989
16		)	Department 38, 9:00 A.M.

17 The Petition of the MAIN SAN GABRIEL BASIN WATERMASTER
18 for this AMENDED JUDGMENT herein, came on regularly for hearing
19 in this Court before the HONORABLE FLORENCE T. PICKARD, ASSIGNED
20 JUDGE PRESIDING, on August 24, 1989; Ralph B. Helm appeared as
21 attorney for Watermaster - Petitioner; and good cause appearing,
22 the following ORDER and AMENDED JUDGMENT are, hereby, made:

23 I. INTRODUCTION

24 1. Pleadings, Parties, and Jurisdiction. The complaint
25 herein was filed on January 2, 1968, seeking an adjudication of
26 water rights. By amendment of said complaint and dismissals of
27 certain parties, said adjudication was limited to the Main San
28 Gabriel Basin and its Relevant Watershed. Substantially all

1 defendants and the cross-defendant have appeared herein, certain
2 defaults have been entered, and other defendants dismissed.
3 By the pleadings herein and by Order of this Court, the issues
4 have been made those of a full inter se adjudication of water
5 rights as between each and all of the parties. This Court has
6 jurisdiction of the subject matter of this action and of the
7 parties herein.

8 2. Stipulation for Entry of Judgment. A substantial
9 majority of the parties, by number and by quantity of rights
10 herein Adjudicated, Stipulated for entry of a Judgment in
11 substantially the form of the original Judgment herein.

12 3. Lis Pendens. (New) A Lis Pendens was recorded August
13 20, 1970, as Document 2650, in Official Records of Los Angeles
14 County, California, in Book M 3554, Page 866.

15 4. Findings and Conclusions. (Prior Judgment Section 3)
16 Trial was had before the Court, sitting without a jury, John
17 Shea, Judge Presiding, commencing on October 30, 1972, and
18 Findings of Fact and Conclusions of Law have been entered
19 herein.

20 5. Judgment. (New) Judgment (and Exhibits Thereto),
21 Findings of Fact and Conclusions of Law (and Exhibits thereto),
22 Order Appointing Watermaster, and Initial Watermaster Order were
23 signed and filed December 29, 1972, and Judgment was entered
24 January 4, 1973, in Book 6791, Page 197.

25 6. Intervention After Judgment. (New) Certain defendants
26 have, pursuant to the Judgment herein and the Court's continuing
27 jurisdiction, intervened and appeared herein after entry of
28 Judgment.

1 7. Amendments to Judgment. (New) The original Judgment
2 herein was previously amended on March 29, 1979, by: (1) adding
3 definition (r [1]) thereto, (2) amending definition (bb)
4 therein, (3) adding Exhibit "K" thereto, (4) adding Sections
5 14.5 and 16.5 thereto, and (5) amending Sections 37(b), 37(c),
6 37(d), and Section 47 therein; it was again amended on December
7 21, 1979, by amending Section 38(c) thereof; again amended on
8 February 21, 1980, by amending Section 24 thereof; again amended
9 on September 12, 1980, by amending Sections 35(a), 37(a), and
10 38(a); again amended on December 22, 1987, by adding Section
11 37(e) thereto; and last amended on July 22, 1988 by amending
12 Section 37(e) thereof and Ordering an Amended Judgment herein.

13 8. Transfers. (New) Since the entry of Judgment herein
14 there have been numerous transfers of Adjudicated water rights.
15 To the date hereof, said transfers are reflected in Exhibits
16 "C", "D", and "E".

17 9. Producers and Their Designees. (New) The current
18 status of Producers and their Designees is shown on Exhibit "L".

19 10. Definitions. (Prior Judgment Section 4) As used in
20 this Judgment, the following terms shall have the meanings
21 herein set forth:

22 (a) Base Annual Diversion Right -- The average annual
23 quantity of water which a Diverter is herein found to have the
24 right to Divert for Direct Use.

25 (b) Direct Use --Beneficial use of water other than
26 for spreading or Ground Water recharge.

27 (c) Divert or Diverting -- To take waters of any
28 surface stream within the Relevant Watershed.

- 1 (d) Diverter -- Any party who Diverts.
- 2 (e) Elevation -- Feet above mean sea level.
- 3 (f) Fiscal Year -- A period July 1 through June 30,
- 4 following.
- 5 (g) Ground Water -- Water beneath the surface of the
- 6 ground and within the zone of saturation.
- 7 (h) Ground Water Basin -- An interconnected permeable
- 8 geologic formation capable of storing a substantial Ground Water
- 9 supply.
- 10 (i) Integrated Producer -- Any party that is both a
- 11 Pumper and a Diverter, and has elected to have its rights
- 12 adjudicated under the optional formula provided in Section 18 of
- 13 this Judgment.
- 14 (j) In-Lieu Water Cost -- The differential between a
- 15 Producer's non-capital cost of direct delivery of Supplemental
- 16 Water and the cost of Production of Ground Water (including
- 17 depreciation on Production facilities) to a particular Producer
- 18 who has been required by Watermaster to take direct delivery of
- 19 Supplemental Water in lieu of Ground Water.
- 20 (k) Key Well -- Baldwin Park Key Well, being elsewhere
- 21 designated as State Well No. 1S/10W-7R2, or Los Angeles County
- 22 Flood Control District Well No. 3030-F. Said well has a ground
- 23 surface Elevation of 386.7.
- 24 (l) Long Beach Case -- Los Angeles Superior Court
- 25 Civil Action No. 722647, entitled, "Long Beach, et al., v. San
- 26 Gabriel Valley Water Company, et al."
- 27 (m) Main San Gabriel Basin or Basin -- The Ground
- 28 Water Basin underlying the area shown as such on Exhibit "A".

1 (n) Make-up Obligation -- The total cost of meeting
2 the obligation of the Basin to the area at or below Whittier
3 Narrows, pursuant to the Judgment in the Long Beach Case.

4 (o) Minimal Producer -- Any party whose Production in
5 any Fiscal Year does not exceed five (5) acre feet.

6 (p) Natural Safe Yield -- The quantity of natural water
7 supply which can be extracted annually from the Basin under
8 conditions of long term average annual supply, net of the
9 requirement to meet downstream rights as determined in the Long
10 Beach Case (exclusive of Pumped export), and under cultural
11 conditions as of a particular year.

12 (q) Operating Safe Yield -- The quantity of water
13 which the Watermaster determines hereunder may be Pumped from
14 the Basin in a particular Fiscal Year, free of the Replacement
15 Water Assessment under the Physical Solution herein.

16 (r) Overdraft -- A condition wherein the total annual
17 Production from the Basin exceeds the Natural Safe Yield
18 thereof.

19 (s) Overlying Rights -- (Prior Judgment Section
20 4 (r) [1]) The right to Produce water from the Basin for use
21 on Overlying Lands, which rights are exercisable only on
22 specifically defined Overlying Lands and which cannot be
23 separately conveyed or transferred apart therefrom.

24 (t) Physical Solution -- (Prior Judgment Section 4
25 (s)) The Court decreed method of managing the waters of the
26 Basin so as to achieve the maximum utilization of the Basin and
27 its water supply, consistent with the rights herein declared.

28 (u) Prescriptive Pumping Right -- (Prior Judgment

1 Section 4 (t)) The highest continuous extractions of water by
2 a Pumper from the Basin for beneficial use in any five (5)
3 consecutive years after commencement of Overdraft and prior to
4 filing of this action, as to which there has been no cessation
5 of use by that Pumper during any subsequent period of five (5)
6 consecutive years, prior to the said filing of this action.

7 (v) Produce or Producing -- (Prior Judgment Section 4
8 (u)) To Pump or Divert water.

9 (w) Producer -- (Prior Judgment Section 4 (v)) A
10 party who Produces water.

11 (x) Production -- (Prior Judgment Section 4 (w)) The
12 annual quantity of water Produced, stated in acre feet.

13 (y) Pump or Pumping -- (Prior Judgment Section 4
14 (x)) To extract Ground Water from the Basin by Pumping or any
15 other method.

16 (z) Pumper -- (Prior Judgment Section 4 (y)) Any
17 party who Pumps water.

18 (aa) Pumper's Share -- (Prior Judgment Section 4 (z))
19 A Pumper's right to a percentage of the entire Natural Safe
20 Yield, Operating Safe Yield and appurtenant Ground Water
21 storage.

22 (bb) Relevant Watershed -- (Prior Judgment Section
23 4(aa)) That portion of the San Gabriel River watershed
24 tributary to Whittier Narrows which is shown as such on Exhibit
25 "A", and the exterior boundaries of which are described in
26 Exhibit "B".

27 (cc) Replacement Water -- (Prior Judgment Section 4
28 (bb)) Water purchased by Watermaster to replace:

1 (1) Production in excess of a Pumper's Share of Operating Safe
2 Yield; (2) The consumptive use portion resulting from the
3 exercise of an Overlying Right; and (3) Production in excess of
4 a Diverter's right to Divert for Direct Use.

5 (dd) Responsible Agency -- (Prior Judgment Section 4
6 (cc)) The municipal water district which is the normal and
7 appropriate source from whom Watermaster shall purchase
8 Supplemental Water for replacement purposes under the Physical
9 Solution, being one of the following:

10 (1) Upper District -- Upper San Gabriel
11 Valley Municipal Water District, a member public agency of
12 The Metropolitan Water District of Southern California
13 (MWD).

14 (2) San Gabriel District -- San Gabriel Valley
15 Municipal Water District, which has a direct contract with
16 the State of California for State Project Water.

17 (3) Three Valleys District -- Three Valleys
18 Municipal Water District, formerly, "Pomona Valley
19 Municipal Water District", a member public agency of MWD.

20 (ee) Stored Water -- (Prior Judgment Section 4 (dd))
21 Supplemental Water stored in the Basin pursuant to a contract
22 with Watermaster as authorized by Section 34(m).

23 (ff) Supplemental Water -- (Prior Judgment Section 4
24 (ee)) Nontributary water imported through a Responsible Agency.

25 (gg) Transporting Parties -- (Prior Judgment Section 4
26 (ff)) Any party presently transporting water (i.e., during the
27 12 months immediately preceding the making of the findings
28 herein) from the Relevant Watershed or Basin to an area outside

1 thereof, and any party presently or hereafter having an interest
2 in lands or having a service area outside the Basin or Relevant
3 Watershed contiguous to lands in which it has an interest or a
4 service area within the Basin or Relevant Watershed. Division
5 by a road, highway, or easement shall not interrupt contiguity.
6 Said term shall also include the City of Sierra Madre, or any
7 party supplying water thereto, so long as the corporate limits
8 of said City are included within one of the Responsible Agencies
9 and if said City, in order to supply water to its corporate area
10 from the Basin, becomes a party to this action bound by this
11 Judgment.

12 (hh) Water Level -- (Prior Judgment Section 4 (gg))
13 The measured Elevation of water in the Key Well, corrected for
14 any temporary effects of mounding caused by replenishment or
15 local depressions caused by Pumping.

16 (ii) Year -- (Prior Judgment Section 4 (hh)) A
17 calendar year, unless the context clearly indicates a contrary
18 meaning.

19 11. Exhibits. (Prior Judgment Section 5) The following
20 exhibits are attached to this Judgment and incorporated herein
21 by this reference:

22 Exhibit "A" -- Map entitled "San Gabriel River
23 Watershed Tributary to Whittier Narrows", showing the
24 boundaries and relevant geologic and hydrologic features in
25 the portion of the watershed of the San Gabriel River lying
26 upstream from Whittier Narrows.

27 Exhibit "B" -- Boundaries of Relevant Watershed.

28 Exhibit "C" -- Table Showing Base Annual Diversion

1 Rights of Certain Diverters.

2 Exhibit "D" -- Table Showing Prescriptive Pumping
3 Rights and Pumper's Share of Each Pumper.

4 Exhibit "E" -- Table Showing Production Rights of Each
5 Integrated Producer.

6 Exhibit "F" -- Table Showing Special Category Rights.

7 Exhibit "G" -- Table Showing Non-consumptive Users.

8 Exhibit "H" -- Watermaster Operating Criteria.

9 Exhibit "J" -- Puente Narrows Agreement.

10 Exhibit "K" -- Overlying Rights, Nature of Overlying
11 Right, Description of Overlying Lands to which Overlying
12 Rights are Appurtenant, Producers Entitled to Exercise
13 Overlying Rights and their Respective Consumptive Use
14 Portions, and Map of Overlying Lands.

15 Exhibit "L" -- (New) List of Producers And Their
16 Designees, as of June 1988.

17 Exhibit "M" -- (New) Watermaster Members, Officers
18 and Staff, Including Calendar Year 1989.

19 II. DECREE

20 NOW, THEREFORE, IT IS HEREBY DECLARED, ORDERED, ADJUDGED
21 AND DECREED:

22 A. DECLARATION OF HYDROLOGIC CONDITIONS

23 12. Basin as Common Source of Supply. (Prior Judgment
24 Section 6) The area shown on Exhibit "A" as Main San Gabriel
25 Basin overlies a Ground Water basin. The Relevant Watershed is
26 the watershed area within which rights are herein adjudicated.
27 The waters of the Basin and Relevant Watershed constitute a
28 common source of natural water supply to the parties herein.

1 13. Determination of Natural Safe Yield. (Prior Judgment
2 Section 7) The Natural Safe Yield of the Main San Gabriel Basin
3 is found and declared to be one hundred fifty-two thousand
4 seven-hundred (152,700) acre feet under Calendar Year 1967
5 cultural conditions.

6 14. Existence of Overdraft. (Prior Judgment Section 8)
7 In each and every Calendar Year commencing with 1953, the Basin
8 has been and is in Overdraft.

9 B. DECLARATION OF RIGHTS

10 15. Prescription. (Prior Judgment Section 9) The use of
11 water by each and all parties and their predecessors in interest
12 has been open, notorious, hostile, adverse, under claim of
13 right, and with notice of said overdraft continuously from
14 January 1, 1953 to January 4, 1973. The rights of each party
15 herein declared are prescriptive in nature. The following
16 aggregate consequences of said prescription within the Basin and
17 Relevant Watershed are hereby declared:

18 (a) Prior Prescription. Diversions within the
19 Relevant Watershed have created rights for direct
20 consumptive use within the Basin, as declared and
21 determined in Sections 16 and 18 hereof, which are of
22 equal priority inter se, but which are prior and paramount
23 to Pumping Rights in the Basin.

24 (b) Mutual Prescription. The aggregate Prescriptive
25 Pumping Rights of the parties who are Pumpers now exceed,
26 and for many years prior to filing of this action, have
27 exceeded, the Natural Safe Yield of the Basin. By reason
28 of said condition, all rights of said Pumpers are declared

1 to be mutually prescriptive and of equal priority, inter
2 se.

3 (c) Common Ownership of Safe Yield and Incidents
4 Thereeto. By reason of said Overdraft and mutual Pre-
5 scription, the entire Natural Safe Yield of the Basin, the
6 Operating Safe Yield thereof and the appurtenant rights to
7 Ground Water storage capacity of the Basin are owned by
8 Pumpers in undivided Pumpers' Shares as hereinafter
9 individually declared, subject to the control of
10 Watermaster, pursuant to the Physical Solution herein
11 decreed. Nothing herein shall be deemed in derogation of
12 the rights to spread water pursuant to rights set forth in
13 Exhibit "G".

14 16. Surface Rights. (Prior Judgment Section 10) Certain
15 of the aforesaid prior and paramount prescriptive water rights
16 of Diverters to Divert for Direct Use stream flow within the
17 Relevant Watershed are hereby declared and found in terms of
18 Base Annual Diversion Right as set forth in Exhibit "C". Each
19 Diverter shown on Exhibit "C" shall be entitled to Divert for
20 Direct Use up to two hundred percent (200%) of said Base Annual
21 Diversion Right in any one (1) Fiscal Year; provided that the
22 aggregate quantities of water Diverted in any consecutive ten
23 (10) Fiscal Year period shall not exceed ten (10) times such
24 Diverter's Base Annual Diversion Right.

25 17. Ground Water Rights. (Prior Judgment Section 11) The
26 Prescriptive Pumping Right of each Pumper, who is not an
27 Integrated Producer, and his Pumper's Share are declared as set
28 forth in Exhibit "D".

1 18. Optional Integrated Production Rights. (Prior
2 Judgment Section 12) Those parties listed on Exhibit "E" have
3 elected to be treated as Integrated Producers. Integrated
4 Production Rights have two (2) historical components:

5 (1) a fixed component based upon historic
6 Diversions for Direct Use; and

7 (2) a mutually prescriptive Pumper's Share
8 component based upon Pumping during the period 1953 through
9 1967.

10 Assessment and other Watermaster regulation of the rights of
11 such parties shall relate to and be based upon each such
12 component. So far as future exercise of such rights is
13 concerned, however, the gross quantity of the aggregate right in
14 any Fiscal Year may be exercised, in the sole discretion of such
15 party, by either Diversion or Pumping or any combination or
16 apportionment thereof; provided, that for Assessment purposes
17 the first water Produced in any Fiscal Year (other than "carry-
18 over", under Section 49 hereof) shall be deemed an exercise of
19 the Diversion component, and any Production over said quantity
20 shall be deemed Pumped water, regardless of the actual method of
21 Production.

22 19. Special Category Rights. (Prior Judgment Section 13)
23 The parties listed on Exhibit "F" have water rights in the
24 Relevant Watershed which are not ordinary Production rights.
25 The nature of each such right is as described in Exhibit "F".

26 20. Non-consumptive Practices. (Prior Judgment Section
27 14) Certain Producers have engaged in Water Diversion and
28 spreading practices which have caused such Diversions to have a

1 non-consumptive or beneficial impact upon the aggregate water
2 supply available in the Basin. Said parties, and a statement of
3 the nature of their rights, uses and practices, are set forth in
4 Exhibit "G". The Physical Solution decreed herein, and
5 particularly its provisions for Assessments, shall not apply to
6 such non-consumptive uses. Watermaster may require reports on
7 the operations of said parties.

8 21. Overlying Rights. (Prior Judgment Section 14.5)
9 Producers listed in Exhibit "K" hereto were not parties herein
10 at the time of the original entry of Judgment herein. They have
11 exercised in good faith Overlying Rights to Produce water from
12 the Basin during the periods subsequent to the entry of Judgment
13 herein and have by self-help initiated or maintained appurtenant
14 Overlying Rights. Such rights are exercisable without
15 quantitative limit only on specifically described Overlying Land
16 and cannot be separately conveyed or transferred apart
17 therefrom. As to such rights and their exercise, the owners
18 thereof shall become parties to this action and be subject to
19 Watermaster Replacement Water Assessments under Section 45 (b)
20 hereof, sufficient to purchase Replenishment Water to offset the
21 net consumptive use of such Production and practices. In
22 addition, the gross amount of such Production for such overlying
23 use shall be subject to Watermaster Administrative Assessments
24 under Section 45 (a) hereof and the consumptive use portion of
25 such Production for overlying use shall be subject to
26 Watermaster's In-Lieu Water Cost Assessments under Section
27 45 (d) hereof. The Producers presently entitled to exercise
28 Overlying Rights, a description of the Overlying Land to which

1 Overlying Rights are appurtenant, the nature of use and the
2 consumptive use portion thereof are set forth in Exhibit "K"
3 hereto. Watermaster may require reports and make inspections of
4 the operations of said parties for purposes of verifying the
5 uses set forth in said Exhibit "K", and, in the event of a
6 material change, to redetermine the net amount of consumptive
7 use by such parties as changed in the exercise of such Overlying
8 Rights. Annually, during the first two (2) weeks of June in
9 each Calendar Year, such Overlying Rights Producers shall submit
10 to Watermaster a verified statement as to the nature of the then
11 current uses of said Overlying Rights on said Overlying Lands
12 for the next ensuing Fiscal Year, whereupon Watermaster shall
13 either affirm the prior determination or redetermine the net
14 amount of the consumptive use portion of the exercise of such
15 Overlying Right by said Overlying Rights Producer.

16 C. INJUNCTION

17 22. Injunction Against Unauthorized Production. (Prior
18 Judgment Section 15) Effective July 1, 1973, each and every
19 party, its officers, agents, employees, successors and assigns,
20 to whom rights to waters of the Basin or Relevant Watershed have
21 been declared and decreed herein is ENJOINED AND RESTRAINED from
22 Producing water for Direct Use from the Basin or the Relevant
23 Watershed except pursuant to rights and Pumpers' Shares herein
24 decreed or which may hereafter be acquired by transfer pursuant
25 to Section 55, or under the provisions of the Physical Solution
26 in this Judgment and the Court's continuing jurisdiction,
27 provided that no party is enjoined from Producing up to five (5)
28 acre feet per Fiscal Year.

1 23. Injunction re Non-consumptive Uses. (Prior Judgment
2 Section 16) Each party listed in Exhibit "G", its officers,
3 agents, employees, successors and assigns, is ENJOINED AND
4 RESTRAINED from materially changing said non-consumptive method
5 of use.

6 24. Injunction Re Change in Overlying Use Without Notice
7 Thereof To Watermaster. (Prior Judgment Section 16.5) Each
8 party listed in Exhibit "K", its officers, agents, employees,
9 successors and assigns, is ENJOINED AND RESTRAINED from
10 materially changing said overlying uses at any time without
11 first notifying Watermaster of the intended change of use, in
12 which event Watermaster shall promptly redetermine the
13 consumptive use portion thereof to be effective after such
14 change.

15 25. Injunction Against Unauthorized Recharge. (Prior
16 Judgment Section 17) Each party, its officers, agents,
17 employees, successors and assigns, is ENJOINED AND RESTRAINED
18 from spreading, injecting or otherwise recharging water in the
19 Basin except pursuant to: (a) an adjudicated non-consumptive
20 use, or (b) consent and approval of or Cyclic Storage Agreement
21 with Watermaster, or (c) subsequent order of this Court.

22 26. Injunction Against Transportation From Basin or
23 Relevant Watershed. (Prior Judgment Section 18) Except upon
24 further order of Court, all parties, other than Transporting
25 Parties and MWD in its exercise of its Special Category Rights,
26 to the extent authorized therein, are ENJOINED AND RESTRAINED
27 from transporting water hereafter Produced from the Relevant
28 Watershed or Basin outside the areas thereof. For purposes of

1 this Section, water supplied through a city water system which
2 lies chiefly within the Basin shall be deemed entirely used
3 within the Basin. Transporting Parties are entitled to continue
4 to transport water to the extent that any Production of water by
5 any such party does not violate the injunctive provisions
6 contained in Section 22 hereof; provided that said water shall
7 be used within the present service areas or corporate or other
8 boundaries and additions thereto so long as such additions are
9 contiguous to the then existing service area or corporate or
10 other boundaries; except that a maximum of ten percent (10%) of
11 use in any Fiscal Year may be outside said then existing service
12 areas or corporate or other boundaries.

13 D. CONTINUING JURISDICTION

14 27. Jurisdiction Reserved. (Prior Judgment Section 19)
15 Full jurisdiction, power and authority are retained by and
16 reserved to the Court for purposes of enabling the Court upon
17 application of any party or of the Watermaster, by motion and
18 upon at least thirty (30) days notice thereof, and after hearing
19 thereon, to make such further or supplemental orders or
20 directions as may be necessary or appropriate for interim
21 operation before the Physical Solution is fully operative, or
22 for interpretation, enforcement or carrying out of this
23 Judgment, and to modify, amend or amplify any of the provisions
24 of this Judgment or to add to the provisions thereof consistent
25 with the rights herein decreed. Provided, that nothing in this
26 paragraph shall authorize:

27 (1) modification or amendment of the quantities
28 specified in the declared rights of any party;

1 (2) modification or amendment of the manner of
2 exercise of the Base Annual Diversion Right or Integrated
3 Production Right of any party; or

4 (3) the imposition of an injunction prohibiting
5 transportation outside the Relevant Watershed or Basin as
6 against any Transporting Party transporting in accordance
7 with the provisions of this Judgment or against MWD as to
8 its Special Category Rights.

9 E. WATERMASTER

10 28. Watermaster to Administer Judgment. (Prior Judgment
11 Section 20) A Watermaster comprised of nine (9) persons, to be
12 nominated as hereinafter provided and appointed by the Court,
13 shall administer and enforce the provisions of this Judgment and
14 any subsequent instructions or orders of the Court thereunder.

15 29. Qualification, Nomination and Appointment. (Prior
16 Judgment Section 21) The nine (9) member Watermaster shall be
17 composed of six (6) Producer representatives and three (3)
18 public representatives qualified, nominated and appointed as
19 follows:

20 (a) Qualification. Any adult citizen of the State of
21 California shall be eligible to serve on Watermaster;
22 provided, however, that no officer, director, employee or
23 agent of Upper District or San Gabriel District shall be
24 qualified as a Producer member of Watermaster.

25 (b) Nomination of Producer Representatives. A
26 meeting of all parties shall be held at the regular meeting
27 of Watermaster in November of each year, at the offices of
28 Watermaster. Nomination of the six (6) Producer

1 representatives shall be by cumulative voting, in person or
2 by proxy, with each Producer entitled to one (1) vote for
3 each one hundred (100) acre feet, or portion thereof, of
4 Base Annual Diversion Right or Prescriptive Pumping Right
5 or Integrated Production Right.

6 (c) Nomination of Public Representatives. On or
7 before the regular meeting of Watermaster in November of
8 each year, the three (3) public representatives shall be
9 nominated by the boards of directors of Upper District
10 (which shall select two [2]) and San Gabriel District
11 (which shall select one [1]). Said nominees shall be
12 members of the board of directors of said public districts.

13 (d) Appointment. All Watermaster nominations shall be
14 promptly certified to the Court, which will in ordinary
15 course confirm the same by an appropriate order appointing
16 said Watermaster; provided, however, that the Court at all
17 times reserves the right and power to refuse to appoint, or
18 to remove, any member of Watermaster.

19 30. Term and Vacancies. (Prior Judgment Section 22) Each
20 member of Watermaster shall serve for a one (1) year term
21 commencing on January 1, following his appointment, or until his
22 successor is appointed. In the event of a vacancy on
23 Watermaster, a successor shall be nominated at a special meeting
24 to be called by Watermaster within ninety (90) days (in the case
25 of a Producer representative) or by action of the appropriate
26 district board of directors (in the case of a public
27 representative).

28 31. Quorum. (Prior Judgment Section 23) Five (5) members

1 of the Watermaster shall constitute a quorum for the transaction
2 of affairs of the Watermaster. Action by the affirmative vote
3 of five (5) members shall constitute action by Watermaster,
4 except that the affirmative vote of six (6) members shall be
5 required:

6 (a) to approve the purchase, spreading or injection of
7 water for Ground Water recharge, or

8 (b) to enter in any Agreement pursuant to Section
9 34 (m) hereof.

10 32. Compensation. (Prior Judgment Section 24) Each
11 Watermaster member shall receive compensation of One Hundred
12 Dollars (\$100.00) per day for each day's attendance at meetings
13 of Watermaster or for each day's service rendered as a
14 Watermaster member at the request of Watermaster, together with
15 any expenses incurred in the performance of his duties required
16 or authorized by Watermaster. No member of the Watermaster
17 shall be employed by or compensated for professional services
18 rendered by him to Watermaster, other than the compensation
19 herein provided, and any authorized travel or related expense.

20 33. Organization. (Prior Judgment Section 25) At its
21 first meeting in each year, Watermaster shall elect a chairman
22 and a vice chairman from its membership. It shall also select a
23 secretary, a treasurer and such assistant secretaries and
24 assistant treasurers as may be appropriate, any of whom may, but
25 need not be, members of Watermaster.

26 (a) Minutes. Minutes of all Watermaster meetings
27 shall be kept which shall reflect all actions taken by
28 Watermaster. Draft copies thereof shall be furnished to

1 any party who files a request therefor in writing with
2 Watermaster. Said draft copies of minutes shall constitute
3 notice of any Watermaster action therein reported; failure
4 to request copies thereof shall constitute waiver of
5 notice.

6 (b) Regular Meetings. Watermaster shall hold regular
7 meetings at places and times to be specified in
8 Watermaster's rules and regulations to be adopted by
9 Watermaster. Notice of the scheduled or regular meetings
10 of Watermaster and of any changes in the time or place
11 thereof shall be mailed to all parties who shall have filed
12 a request therefor in writing with Watermaster.

13 (c) Special Meetings. Special meetings of
14 Watermaster may be called at any time by the chairman or
15 vice chairman or by any three (3) members of Watermaster by
16 written notice delivered personally or mailed to each
17 member of Watermaster and to each party requesting notice,
18 at least twenty-four (24) hours before the time of each
19 such meeting in the case of personal delivery, and forty-
20 eight (48) hours prior to such meeting in the case of mail.
21 The calling notice shall specify the time and place of the
22 special meeting and the business to be transacted at such
23 meeting. No other business shall be considered at such
24 meeting.

25 (d) Adjournments. Any meeting of Watermaster may be
26 adjourned to a time and place specified in the order of
27 adjournment. Less than a quorum may so adjourn from time
28 to time. A copy of the order or notice of adjournment

1 shall be conspicuously posted on or near the door of the
2 place where the meeting was held within twenty-four (24)
3 hours after adoption of the order of adjournment.

4 34. Powers and Duties. (Prior Judgment Section 26)

5 Subject to the continuing supervision and control of the Court,
6 Watermaster shall have and may exercise the following express
7 powers, and shall perform the following duties, together with
8 any specific powers, authority and duties granted or imposed
9 elsewhere in this Judgment or hereafter ordered or authorized by
10 the Court in the exercise of its continuing jurisdiction.

11 (a) Rules and Regulations. To make and adopt any and
12 all appropriate rules and regulations for conduct of
13 Watermaster affairs. A copy of said rules and regulations
14 and any amendments thereof shall be mailed to all parties.

15 (b) Acquisition of Facilities. To purchase, lease,
16 acquire and hold all necessary property and equipment;
17 provided, however, that Watermaster shall not acquire any
18 interest in real property in excess of year-to-year tenancy
19 for necessary quarters and facilities.

20 (c) Employment of Experts and Agents. To employ such
21 administrative personnel, engineering, geologic,
22 accounting, legal or other specialized services and
23 consulting assistants as may be deemed appropriate in
24 the carrying out of its powers and to require appropriate
25 bonds from all officers and employees handling Watermaster
26 funds.

27 (d) Measuring Devices, etc. To cause parties,
28 pursuant to uniform rules, to install and maintain in good

1 operating condition, at the cost of each party, such
2 necessary measuring devices or meters as may be
3 appropriate; and to inspect and test any such measuring
4 device as may be necessary.

5 (e) Assessments. To levy and collect all Assessments
6 specified in the Physical Solution.

7 (f) Investment of Funds. To hold and invest any and
8 all funds which Watermaster may possess in investments
9 authorized from time to time for public agencies in the
10 State of California.

11 (g) Borrowing. To borrow in anticipation of receipt
12 of Assessment proceeds an amount not to exceed the annual
13 amount of Assessments levied but uncollected.

14 (h) Purchase of and Recharge with Supplemental Water.
15 To purchase Supplemental Water and to introduce the same
16 into the Basin for replacement or cyclic storage purposes,
17 subject to the affirmative vote of six (6) members of
18 Watermaster.

19 (i) Contracts. To enter into contracts for the
20 performance of any administrative powers herein granted,
21 subject to approval of the Court.

22 (j) Cooperation With Existing Agencies. To act
23 jointly or cooperate with agencies of the United States and
24 the State of California or any political subdivision,
25 municipality or district to the end that the purposes of
26 the Physical Solution may be fully and economically carried
27 out. Specifically, in the event Upper District has
28 facilities available and adequate to accomplish any of the

1 administrative functions of Watermaster, consideration
2 shall be given to performing said functions under contract
3 with Upper District in order to avoid duplication of
4 facilities.

5 (k) Assumption of Make-up Obligation. Watermaster
6 shall assume the Make-up Obligation for and on behalf of
7 the Basin.

8 (m) Water Quality. Water quality in the Basin shall
9 be a concern of Watermaster, and all reasonable steps shall
10 be taken to assist and encourage appropriate regulatory
11 agencies to enforce reasonable water quality regulations
12 affecting the Basin, including regulation of solid and
13 liquid waste disposal.

14 (n) Cyclic Storage Agreements. To enter into
15 appropriate contracts, to be approved by the Court, for
16 utilization of Ground Water storage capacity of the Basin
17 for cyclic or regulatory storage of Supplemental Water by
18 parties and non-parties, for subsequent recovery or
19 Watermaster credit by the storing entity, pursuant to
20 uniform rules and conditions, which shall include provision
21 for:

22 (1) Watermaster control of all spreading or
23 injection and extraction scheduling and procedures for
24 such stored water;

25 (2) calculation by Watermaster of any special
26 costs, damages or burdens resulting from such
27 operations;

28 (3) determination by Watermaster of, and

1 accounting for, all losses in stored water, assuming
2 that such stored water floats on top of the Ground
3 Water supplies, and accounting for all losses of water
4 which otherwise would have replenished the Basin, with
5 priorities being established as between two or more
6 such contractors giving preference to parties over
7 non-parties; and

8 (4) payment to Watermaster for the benefit of the
9 parties hereto of all special costs, damages or
10 burdens incurred (without any charge, rent, assessment
11 or expense as to parties hereto by reason of the
12 adjudicated proprietary character of said storage
13 rights, nor credit or offset for benefits resulting
14 from such storage); provided, that no party shall have
15 any direct interest in or control over such contracts
16 or the operation thereof by reason of the adjudicated
17 right of such party, the Watermaster having sole
18 custody and control of all Ground Water storage rights
19 in the Basin pursuant to the Physical Solution herein,
20 and subject to review of the Court.

21 (o) Notice List. Maintain a current list of party
22 designees to receive notice hereunder, in accordance with
23 Section 54 hereof.

24 35. Policy Decisions -- Procedure. (Prior Judgment
25 Section 27) It is contemplated that Watermaster will exercise
26 discretion in making policy decisions relating to Basin
27 management under the Physical Solution decreed herein. In order
28 to assure full participation and opportunity to be heard for

1 those affected, no policy decision shall be made by Watermaster
2 until thirty (30) days after the question involved has been
3 raised for discussion at a Watermaster meeting and noted in the
4 draft of minutes thereof.

5 36. Reports. (Prior Judgment Section 28) Watermaster
6 shall annually file with the Court and mail to the parties a
7 report of all Watermaster activities during the preceding year,
8 including an audited statement of all accounts and financial
9 activities of Watermaster, summary reports of Diversions and
10 Pumping, and all other pertinent information. To the extent
11 practical, said report shall be mailed to all parties on or
12 before November 1.

13 37. Review Procedures. (Prior Judgment Section 29)
14 Any action, decision, rule or procedure of Watermaster (other
15 than a decision establishing Operating Safe Yield, see Section
16 43[c]) shall be subject to review by the Court on its own motion
17 or on timely motion for an Order to Show Cause by any party, as
18 follows:

19 (a) Effective Date of Watermaster Action. Any order,
20 decision or action of Watermaster shall be deemed to have
21 occurred on the date that written notice thereof is mailed.
22 Mailing of draft copies of Watermaster minutes to the
23 parties requesting the same shall constitute notice to all
24 such parties.

25 (b) Notice of Motion. Any party may, by a regularly
26 noticed motion, petition the Court for review of said
27 Watermaster's action or decision. Notice of such motion
28 shall be mailed to Watermaster and all parties. Unless so

1 ordered by the Court, such petition shall not operate to
2 stay the effect of such Watermaster action.

3 (c) Time for Motion. Notice of motion to review any
4 Watermaster action or decision shall be served and filed
5 within ninety (90) days after such Watermaster action or
6 decision.

7 (d) De Novo Nature of Proceeding. Upon filing of such
8 motion for hearing, the Court shall notify the parties of a
9 date for taking evidence and argument, and shall review de
10 novo the question at issue on the date designated. The
11 Watermaster decision or action shall have no evidentiary
12 weight in such proceeding.

13 (e) Decision. The decision of the Court in such
14 proceeding shall be an appealable Supplemental Order in
15 this case. When the same is final, it shall be binding
16 upon the Watermaster and the parties.

17 F. PHYSICAL SOLUTION

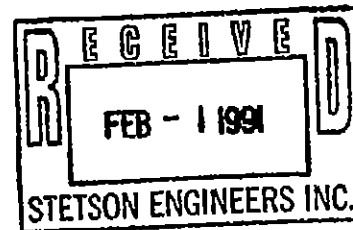
18 38. Purpose and Objective. (Prior Judgment Section 30)
19 Consistent with the California Constitution and the decisions of
20 the Supreme Court, the Court hereby adopts and Orders the
21 parties to comply with this Physical Solution. The purpose and
22 objective of these provisions is to provide a legal and
23 practical means for accomplishing the most economic, long term,
24 conjunctive utilization of surface, Ground Water, Supplemental
25 Water and Ground Water storage capacity to meet the needs and
26 requirements of the water users dependent upon the Basin and
27 Relevant Watershed, while preserving existing equities.

28 39. Need for Flexibility. (Prior Judgment Section 31) In

1 Ralph B. Helm - Bar No. 022004
2 4605 Lankershim Boulevard, #214
3 North Hollywood, CA 91602

4 Telephone (818) 769-2002

5 Attorney for Watermaster - Petitioner



6
7
8 SUPERIOR COURT OF CALIFORNIA, COUNTY OF LOS ANGELES
9

10	UPPER SAN GABRIEL VALLEY	)	No. 924129
11	MUNICIPAL WATER DISTRICT,)	
12	Plaintiff,	)	ORDER AMENDING JUDGMENT TO
13	vs.	)	EXPAND WATERMASTER'S POWERS
14	CITY OF ALHAMBRA, et al.,	)	TO INCLUDE MAINTENANCE,
15	Defendants.	)	IMPROVEMENT, AND CONTROL OF
16		)	BASIN WATER QUALITY WITH
		)	ALLOWABLE FUNDING THROUGH
		)	IN-LIEU ASSESSMENTS
		)	Hearing: August 7, 1990
		)	Department 38, 9:15 A. M.

17 The Petition of the Main San Gabriel Basin Watermaster
18 (Watermaster) for Amendment to Judgment herein to expand its
19 powers to include maintenance, improvement, and control of Basin
20 water quality by controlling pumping in the Basin, with
21 allowable funding for associated costs to be paid through its
22 In-Lieu Assessments, was continued on July 31, 1990, to August
23 7, 1990, when it duly and regularly came on for hearing, at 9:15
24 o'clock A. M. in Department 38 of the above entitled Court, the
25 Honorable FLORENCE T. PICKARD, Assigned Judge Presiding. Ralph
26 B. Helm appeared as Attorney for Watermaster - Petitioner; Wayne
27 K. Lemieux appeared for Defendant, San Gabriel Valley Municipal
28 Water District, in support of the Petition; Fred Vendig, General

1 Counsel, Karen L. Tachiki, Assistant General Counsel, and
2 Victor E. Gleason, Senior Deputy General Counsel, by Victor E.
3 Gleason, appeared for Defendant, The Metropolitan Water District
4 of Southern California, in support of the Petition; Timothy J.
5 Ryan appeared for Defendant, San Gabriel Valley Water Company,
6 in opposition to the Petition; Lagerlof, Senecal, Drescher &
7 Swift, by H. Jess Senecal, appeared for Defendants, Calmat
8 Company, Livingston-Graham, Owl Rock Products, AZ-Two, Inc., and
9 Sully-Miller Contracting Company, in opposition to the Petition;
10 Ira Reiner, Los Angeles County District Attorney, by Jan
11 Chatten-Brown, Special Assistant to the District Attorney,
12 appeared in opposition to the Petition; and Sarah F. Bates and
13 Laurens H. Silver, by Sarah F. Bates, appeared on behalf of
14 Amicus Curiae Sierra Club, in opposition to the Petition.

15 The Court acknowledged receipt and consideration of:
16 letters in support of the Petition by the California Regional
17 Water Quality Control Board - Los Angeles Region and by the
18 State Water Resources Control Board; a copy of a letter
19 addressed to the Attorney for Petitioner, from the US
20 Environmental Protection Agency - Region IX, by Mark J.
21 Klaiman, Assistant Regional Counsel, regarding several matters
22 of federal law which EPA believed might ultimately affect the
23 subject Petition; a letter in opposition to the Petition by East
24 Valleys Organization; and a FAX communication to the Court, in
25 opposition to the Petition, from Congressman Esteban E. Torres,
26 which was not communicated to nor seen by the parties.

27 Members of the public, present in Court, were invited to,
28 and did, present oral testimony during the hearing.

1 Under date of December 10, 1990 the Court entered its
2 Intended Decision Re Amendment To Judgment and, by minute order
3 duly entered and mailed to Counsel for Petitioner, ordered
4 copies thereof mailed forthwith to all appearing parties,
5 including those appearing as friends of the court, and to all
6 other affected parties on the case's current mailing list.

7 A Proof Of Service by mail on December 13, 1990, Of
8 Intended Decision Re Amendment To Judgment, as ordered, has been
9 filed with the Court.

10 Opposition to Petitioner's Proposed Order were filed by
11 Amicus Curiae Sierra Club, Amicus Curiae Los Angeles District
12 Attorney, and by Producer Parties Calmat Co., Livingston-Graham,
13 Owl Rock Products Company, AZ-Two, Inc., and Sully-Miller
14 Contracting Company.

15 Proof being made to the satisfaction of the Court and good
16 cause appearing:

17 IT IS, HEREBY, ORDERED:

18 1. That the Amended Judgment herein be further amended by
19 amending Subsection (j) of Section 10 thereof, Definitions, and
20 Section 40 thereof, Division F, Physical Solution, to read as
21 follows:

22 "10 (j) In-Lieu Water Cost - - The differential between a
23 particular Producer's cost of Watermaster directed produced,
24 treated, blended, substituted, or Supplemental Water delivered
25 or substituted to, for, or taken by, such Producer in-lieu of
26 his cost of otherwise normally Producing a like amount of Ground
27 Water from the Basin.

28 "40. Watermaster Control. (Prior Judgment Section 32)

1 In order to develop an adequate and effective program of Basin
2 management, it is essential that Watermaster have broad
3 discretion in the making of Basin management decisions within
4 the ambit hereinafter set forth. The maintenance, improvement,
5 and control of the water quality and quantity of the Basin,
6 withdrawal and replenishment of supplies of the Basin and
7 Relevant Watershed, and the utilization of the water resources
8 thereof, must be subject to procedures established by
9 Watermaster in implementation of the Physical Solution
10 provisions of this Judgment. Both the quantity and quality of
11 said water resource are thereby preserved and its beneficial
12 utilization maximized.

13 "(a) Watermaster shall develop an adequate and effective
14 program of Basin management. The maintenance, improvement, and
15 control of the water quality and quantity of the Basin,
16 withdrawal and replenishment of supplies of the Basin and
17 Relevant Watershed, and the utilization of the water resources
18 thereof, must be subject to procedures established by
19 Watermaster in implementation of the Physical Solution
20 provisions of this Judgment. All Watermaster programs and
21 procedures shall be adopted only after a duly noticed public
22 hearing pursuant to Sections 37 and 40 of the Amended Judgment
23 herein.

24 "(b) Watermaster shall have the power to control pumping in
25 the Basin by water Producers therein for Basin cleanup and water
26 quality control so that specific well production can be directed
27 as to a lesser amount, to total cessation, as to an increased
28 amount, and even to require pumping in a new location in the

1 Basin. Watermaster's right to regulate pumping activities of
2 Producers shall be subordinate to any conflicting Basin cleanup
3 plan established by the EPA or other public governmental agency
4 with responsibility for ground water management or clean up.

5 "(c) Watermaster may act individually or participate with
6 others to carry on technical and other necessary investigations
7 of all kinds and collect data necessary to carry out the herein
8 stated purposes. It may engage in contractual relations with
9 the EPA or other agencies in furtherance of the clean up of the
10 Basin and enter into contracts with agencies of the United
11 States, the State of California, or any political subdivision,
12 municipality, or district thereof, to the extent allowed under
13 applicable federal or state statutes. Any cooperative agreement
14 between the Watermaster and EPA shall require the approval of
15 the appropriate Agency(s) of the State of California.

16 "(d) For regulation and control of pumping activity in the
17 Basin, Watermaster shall adopt Rules and Regulations and
18 programs to promote, manage and accomplish clean up of the Basin
19 and its waters, including, but not limited to, measures to
20 confine, move, and remove contaminants and pollutants. Such
21 Rules and Regulations and programs shall be adopted only after a
22 duly Noticed Public Hearing by Watermaster and shall be subject
23 to Court review pursuant to Section 37 of the Amended Judgment
24 herein.

25 "(e) Watermaster shall determine whether funds from local,
26 regional, state or federal agencies are available for regulating
27 pumping and the various costs associated with, or arising from
28 such activities. If no public funds are available from local,

1 regional, state, or federal agencies, the costs shall be
2 obtained and paid by way of an In-Lieu Assessment by Watermaster
3 pursuant to Section 10 (j) of the Amended Judgment herein.
4 Provided such In-Lieu Assessments become necessary, the costs
5 shall be borne by all Basin Producers.

6 "(f) Watermaster is a Court empowered entity with limited
7 powers, created pursuant to the Court's Physical Solution
8 Jurisdiction under Article X, Section 2 of the California
9 Constitution. None of the Powers granted herein to Watermaster
10 shall be construed as designating Watermaster a political
11 subdivision of the State of California or authorizing
12 Watermaster to act as 'lead agency' to administer the federal
13 Superfund for clean up of the Basin."

14 2. This Amended Judgment shall continue in full force and
15 effect as hereby Ordered and Amended.

16 Dated: January 29, 1991.

17
18 /s/Florence T. Pickard
19 FLORENCE T. PICKARD
20 Judge of the Superior Court,
21 Specially Assigned
22
23
24
25
26
27
28

1 order that Watermaster may be free to utilize both existing and
2 new and developing technological, social and economic concepts
3 for the fullest benefit of all those dependent upon the Basin,
4 it is essential that the Physical Solution hereunder provide for
5 maximum flexibility and adaptability. To that end, the Court
6 has retained continuing jurisdiction to supplement the broad
7 discretion herein granted to the Watermaster.

8 40. Watermaster Control. (Prior Judgment Section 32) In
9 order to develop an adequate and effective program of Basin
10 management, it is essential that Watermaster have broad
11 discretion in the making of Basin management decisions within
12 the ambit hereinafter set forth. Withdrawal and replenishment
13 of supplies of the Basin and Relevant Watershed and the
14 utilization of the water resources thereof, and of available
15 Ground Water storage capacity, must be subject to procedures
16 established by Watermaster in implementation of the provisions
17 of this Judgment. Both the quantity and quality of said water
18 resource are thereby preserved and its beneficial utilization
19 maximized.

20 41. General Pattern of Contemplated Operation. (Prior
21 Judgment Section 33) In general outline (subject to the
22 specific provisions hereafter and to Watermaster Operating
23 Criteria set forth in Exhibit "H"), Watermaster will determine
24 annually the Operating Safe Yield of the Basin and will notify
25 each Pumper of his share thereof, stated in acre feet per Fiscal
26 Year. Thereafter, no party may Produce in any Fiscal Year an
27 amount in excess of the sum of his Diversion Right, if any, plus
28 his Pumper's Share of such Operating Safe Yield, or his

1 Integrated Production Right, or the terms of any Cyclic Storage
2 Agreement, without being subject to Assessment for the purpose
3 of purchasing Replacement Water. In establishing the Operating
4 Safe Yield, Watermaster shall follow all physical, economic, and
5 other relevant parameters provided in the Watermaster Operating
6 Criteria. Watermaster shall have Assessment powers to raise
7 funds essential to implement the management plan in any of the
8 several special circumstances herein described in more detail.

9 42. Basin Operating Criteria. (Prior Judgment Section 34)
10 Until further order of the Court and in accordance with the
11 Watermaster Operating Criteria, Watermaster shall not spread
12 Replacement Water when the water level at the Key Well exceeds
13 Elevation two hundred fifty (250), and Watermaster shall spread
14 Replacement Water, insofar as practicable, to maintain the water
15 level at the Key Well above Elevation two hundred (200).

16 43. Determination of Operating Safe Yield. (Prior
17 Judgment Section 35) Watermaster shall annually determine the
18 Operating Safe Yield applicable to the succeeding Fiscal Year
19 and estimate the same for the next succeeding four (4) Fiscal
20 Years. In making such determination, Watermaster shall be
21 governed in the exercise of its discretion by the Watermaster
22 Operating Criteria. The procedures with reference to said
23 determination shall be as follows:

24 (a) Preliminary Determination. On or before
25 Watermaster's first meeting in April of each year,
26 Watermaster shall make a Preliminary Determination of the
27 Operating Safe Yield of the Basin for each of the
28 succeeding five Fiscal Years. Said determination shall be

1 made in the form of a report containing a summary statement
2 of the considerations, calculations and factors used by
3 Watermaster in arriving at said Operating Safe Yield.

4 (b) Notice and Hearing. A copy of said Preliminary
5 Determination and report shall be mailed to each Pumper and
6 Integrated Producer at least ten (10) days prior to a
7 hearing to be held at Watermaster's regular meeting in May,
8 of each year, at which time objections or suggested
9 corrections or modifications of said determinations shall
10 be considered. Said hearing shall be held pursuant to
11 procedures adopted by Watermaster.

12 (c) Watermaster Determination and Review Thereof.
13 Within thirty (30) days after completion of said hearing,
14 Watermaster shall mail to each Pumper and Integrated
15 Producer a final report and determination of said Operating
16 Safe Yield for each such Fiscal Year, together with a
17 statement of the Producer's entitlement in each such Fiscal
18 Year stated in acre feet. Any affected party, within
19 thirty (30) days of mailing of notice of said Watermaster
20 determination, may, by a regularly noticed motion, petition
21 the Court for an Order to Show Cause for review of said
22 Watermaster finding, and thereupon the Court shall hear
23 such objections and settle such dispute. Unless so ordered
24 by the Court, such petition shall not operate to stay the
25 effect of said report and determination. In the absence of
26 such review proceedings, the Watermaster determination
27 shall be final.

28 44. Reports of Pumping and Diversion. (Prior Judgment

1 Section 36) Each party (other than Minimal Producers) shall
2 file with the Watermaster quarterly, on or before the last day
3 of January, April, July and October, a report on a form to be
4 prescribed by Watermaster showing the total Pumping and
5 Diversion (separately for Direct Use and for non-consumptive
6 use, if any,) of such party during the preceding calendar
7 quarter.

8 45. Assessments -- Purpose. (Prior Judgment Section 37)
9 Watermaster shall have the power to levy and collect Assessments
10 from the parties (other than Minimal Producers, non-consumptive
11 users, or Production under Special Category Rights or Cyclic
12 Storage Agreements) based upon Production during the preceding
13 Fiscal Year. Said Assessments may be for one or more of the
14 following purposes:

15 (a) Watermaster Administration Costs. Within thirty
16 (30) days after completion of the hearing on the
17 Preliminary Determination of the Operating Safe Yield of
18 the Basin and Watermaster's determination thereof, pursuant
19 to Section 43 hereof, Watermaster shall adopt a proposed
20 budget for the succeeding Fiscal Year and shall mail a copy
21 thereof to each party, together with a statement of the
22 level of Administration Assessment levied by Watermaster
23 which will be collected for purposes of raising funds for
24 said budget. Said Assessment shall be uniformly applicable
25 to each acre foot of Production.

26 (b) Replacement Water Costs. Replacement Water
27 Assessments shall be collected from each party on account
28 of such party's Production in excess of its Diversion

1 Rights, Pumper's Share or Integrated Production Right, and
2 on account of the consumptive use portion of Overlying
3 Rights, computed at the applicable rate established by
4 Watermaster consistent with the Watermaster Operating
5 Criteria.

6 (c) Make-Up Obligation. An Assessment shall be
7 collected equally on account of each acre foot of
8 Production, which does not bear a Replacement Assessment
9 hereunder, to pay all necessary costs of Administration and
10 satisfaction of the Make-Up Obligation. Such Assessment
11 shall not be applicable to water Production for an
12 Overlying Right.

13 (d) In-Lieu Water Cost. Watermaster may levy an
14 Assessment against all Pumping to pay reimbursement for In-
15 Lieu Water Costs except that such Assessment shall not be
16 applicable to the non-consumptive use portion of an
17 Overlying Right.

18 (e) Basin Water Quality Improvement. For purposes of
19 testing, protecting or improving the water quality in the
20 Basin, Watermaster may, after a noticed hearing thereon,
21 fix terms and conditions under which it may waive all or
22 any part of its Assessments on such ground water
23 Production and if such Production, in addition to his other
24 Production, does not exceed such Producer's Share or
25 entitlement for that Fiscal Year, such stated Production
26 shall be allowed to be carried over for a part of such
27 Producer's next Fiscal Year's Producer's Share or
28 entitlement. In connection therewith, Watermaster may also

1 waive the provisions of Sections 25, 26 and 57 hereof,
2 relating to Injunction Against Unauthorized Recharge,
3 Injunction Against Transportation From Basin or Relevant
4 Watershed, and Intervention After Judgment, respectively.
5 Nothing in this Judgment is intended to allow an increase
6 in any Producer's annual entitlement nor to prevent
7 Watermaster, after hearing thereon, from entering into
8 contracts to encourage, assist and accomplish the clean up
9 and improvement of degraded water quality in the Basin by
10 non-parties herein. Such contracts may include the
11 exemption of the Production of such Basin water therefor
12 from Watermaster Assessments and, in connection therewith,
13 the waiver of the provisions of Judgment Sections 25, 26,
14 and 57 hereof.

15 46. Assessments -- Procedure. (Prior Judgment Section 38)

16 Assessments herein provided for shall be levied and collected
17 as follows:

18 (a) Levy and Notice of Assessment. Within thirty
19 (30) days of Watermaster's annual determination of
20 Operating Safe Yield of the Basin for each Fiscal Year and
21 succeeding four (4) Fiscal Years, Watermaster shall levy
22 applicable Administration Assessments, Replacement Water
23 Assessments, Make-up Water Assessments and In-Lieu Water
24 Assessments, if any. Watermaster shall give written notice
25 of all applicable Assessments to each party on or before
26 August 15, of each year.

27 (b) Payment. Each Assessment shall be payable, and
28 each party is Ordered to pay the same, on or before

1 September 20, following such Assessment, subject to the
2 rights reserved in Section 37 hereof.

3 (c) Delinquency. Any Assessment which becomes
4 delinquent after January 1, 1980, shall bear interest at
5 the annual prime rate plus one percent (1%) in effect on
6 the first business day of August of each year. Said prime
7 interest rate shall be that fixed by the Bank of America
8 NT&SA for its preferred borrowing customers on said date.
9 Said prime interest rate plus one percent (1%) shall be
10 applicable to any said delinquent Assessment from the due
11 date thereof until paid. Provided, however, in no event
12 shall any said delinquent Assessment bear interest at a
13 rate of less than ten percent (10%) per annum. Such
14 delinquent Assessment and interest may be collected in a
15 Show Cause proceeding herein or any other legal proceeding
16 instituted by Watermaster, and in such proceeding the Court
17 may allow Watermaster its reasonable costs of collection,
18 including attorney's fees.

19 47. Availability of Supplemental Water From Responsible
20 Agencies. (Prior Judgment Section 39) If any Responsible
21 Agency shall, for any reason, be unable to deliver Supplemental
22 Water to Watermaster when needed, Watermaster shall collect
23 funds at an appropriate level and hold them in trust, together
24 with interest accrued thereon, for purchase of such water when
25 available.

26 48. Accumulation of Replacement Water Assessment Proceeds.
27 (Prior Judgment Section 40) In order to minimize fluctuation
28 in Assessments and to give Watermaster flexibility in Basin

1 management, Watermaster may make reasonable accumulations of
2 Replacement Water Assessments. Such moneys and any interest
3 accrued thereon shall only be used for the purchase of
4 Replacement Water.

5 49. Carry-over of Unused Rights. (Prior Judgment Section
6 41) Any Pumper's Share of Operating Safe Yield, and the
7 Production right of any Integrated Producer, which is not
8 Produced in a given Fiscal Year may be carried over and
9 accumulated for one Fiscal Year, pursuant to reasonable rules
10 and procedures for notice and accounting which shall be adopted
11 by Watermaster. The first water Produced in the succeeding
12 Fiscal Year shall be deemed Produced pursuant to such Carry-over
13 Rights.

14 50. Minimal Producers. (Prior Judgment Section 42) In
15 the interest of Justice, Minimal Producers are exempted from the
16 operation of this Physical Solution, so long as such party's
17 annual Production does not exceed five (5) acre feet. Quarterly
18 Production reports by such parties shall not be required, but
19 Watermaster may require, and Minimal Producers shall furnish,
20 specific periodic reports. In addition, Watermaster may conduct
21 such investigation of future operations of any Minimal Producer
22 as may be appropriate.

23 51. Effective Date. (Prior Judgment Section 43) The
24 effective date for commencing accounting and operation under
25 this Physical Solution, other than for Replacement Water
26 Assessments, shall be July 1, 1972. The first Assessment for
27 Replacement Water shall be payable on September 20, 1974, on
28 account of Fiscal Year 1973-74 Production.

1 G. MISCELLANEOUS PROVISIONS

2 52. Puente Narrows Flow. (Prior Judgment Section 44)

3 The Puente Basin is tributary to the Main San Gabriel Basin.
4 All Producers within said Puente Basin have been dismissed
5 herein, based upon the Puente Narrows Agreement (Exhibit "J"),
6 whereby Puente Basin Water Agency agreed not to interfere with
7 surface inflow and to assure continuance of historic subsurface
8 contribution of water to Main San Gabriel Basin. The Court
9 declares said Agreement to be reasonable and fair and in full
10 satisfaction of claims by Main San Gabriel Basin for natural
11 water from Puente Basin.

12 53. San Gabriel District - Interim Order. (Prior Judgment
13 Section 45) San Gabriel District has a contract with the State
14 of California for State Project Water, delivered at Devil Canyon
15 in San Bernardino County. San Gabriel District is HEREBY
16 ORDERED to proceed with and complete necessary pipeline
17 facilities as soon as practical.

18 Until said pipeline is built and capable of delivering a
19 minimum of twenty-eight thousand eight-hundred (28,800) acre
20 feet of State Project water per year, defendant cities of
21 Alhambra, Azusa, and Monterey Park shall pay to Watermaster each
22 Fiscal Year a Replacement Assessment at a uniform rate
23 sufficient to purchase Replenishment Water when available,
24 which rate shall be declared by San Gabriel District.
25 When water is available through said pipeline, San Gabriel
26 District shall make the same available to Watermaster, on his
27 reasonable demand, at said specified rate per acre foot.
28 Interest accrued on such funds shall be paid to San Gabriel

1 District.

2 54. Service Upon and Delivery to Parties of Various
3 Papers. (Prior Judgment Section 46) Service of the Judgment
4 on those parties who have executed the Stipulation for Judgment
5 shall be made by first class mail, postage prepaid, addressed to
6 the Designee and at the address designated for that purpose in
7 the executed and filed counterpart of the Stipulation for
8 Judgment, or in any substitute designation filed with the Court.

9 Each party who has not heretofore made such a designation
10 shall, within thirty (30) days after the Judgment shall have
11 been served upon that party, file with the Court, with proof of
12 service of a copy thereof upon Watermaster, a written
13 designation of the person to whom and the address at which all
14 future notices, determinations, requests, demands, objections,
15 reports and other papers and processes to be served upon that
16 party or delivered to that party are to be so served or
17 delivered.

18 A later substitute designation filed and served in the same
19 manner by any party shall be effective from the date of filing
20 as to the then future notices, determinations, requests,
21 demands, objections, reports and other papers and processes to
22 be served upon or delivered to that party.

23 Delivery to or service upon any party by Watermaster, by
24 any other party, or by the Court, of any item required to be
25 served upon or delivered to a party under or pursuant to the
26 Judgment may be made by deposit thereof (or by copy thereof) in
27 the mail, first class, postage prepaid, addressed to the
28 Designee of the party and at the address shown in the latest

1 designation filed by that party.

2 55. Assignment, Transfer, etc., of Rights. (Prior
3 Judgment Section 47) Any rights Adjudicated herein except
4 Overlying Rights, may be assigned, transferred, licensed or
5 leased by the owners thereof; provided however, that no such
6 assignment shall be complete until the appropriate notice
7 procedures established by Watermaster have been complied with.
8 No water Produced pursuant to rights assigned, transferred,
9 licensed, or leased may be transported outside the Relevant
10 Watershed except by:

11 (1) a Transporting Party, or

12 (2) a successor in interest immediate or mediate to a
13 water system on lands or portion thereof, theretofore
14 served by such a Transporting Party, for use by such
15 successor in accordance with limitations applicable to
16 Transporting Parties, or

17 (3) a successor in interest to the Special Category
18 rights of MWD.

19 The transfer and use of Overlying Rights shall be
20 limited, as provided in Section 21 hereof, as exercisable
21 only on the specifically defined Overlying Lands and they
22 cannot be separately conveyed or transferred apart therefrom.

23 56. Abandonment of Rights. (Prior Judgment Section 48)
24 It is in the interest of reasonable beneficial use of the Basin
25 and its water supply that no party be encouraged to take and use
26 more water in any Fiscal Year than is actually required.
27 Failure to Produce all of the water to which a party is entitled
28 hereunder shall not, in and of itself, be deemed or constitute

1 an abandonment of such party's right, in whole or in part.
2 Abandonment and extinction of any right herein Adjudicated shall
3 be accomplished only by:

4 (1) a written election by the party, filed in this
5 case, or

6 (2) upon noticed motion of Watermaster, and after
7 hearing.

8 In either case, such abandonment shall be confirmed by
9 express subsequent order of this Court.

10 57. Intervention After Judgment. (Prior Judgment Section
11 49) Any person who is not a party or successor to a party and
12 who proposes to Produce water from the Basin or Relevant
13 Watershed, may seek to become a party to this Judgment through a
14 Stipulation For Intervention entered into with Watermaster.
15 Watermaster may execute said Stipulation on behalf of the other
16 parties herein but such Stipulation shall not preclude a party
17 from opposing such Intervention at the time of the Court hearing
18 thereon. Said Stipulation For Intervention must thereupon be
19 filed with the Court, which will consider an order confirming
20 said Intervention following thirty (30) days' notice to the
21 parties. Thereafter, if approved by the Court, such Intervenor
22 shall be a party bound by this Judgment and entitled to the
23 rights and privileges accorded under the Physical Solution
24 herein.

25 58. Judgment Binding on Successors, etc. (Prior Judgment
26 Section 50) Subject to specific provisions hereinbefore
27 contained, this Judgment and all provisions thereof are
28 applicable to and binding upon and inure to the benefit of not

1 only the parties to this action, but as well to their respective
2 heirs, executors, administrators, successors, assigns, lessees,
3 licensees and to the agents, employees and attorneys in fact of
4 any such persons.

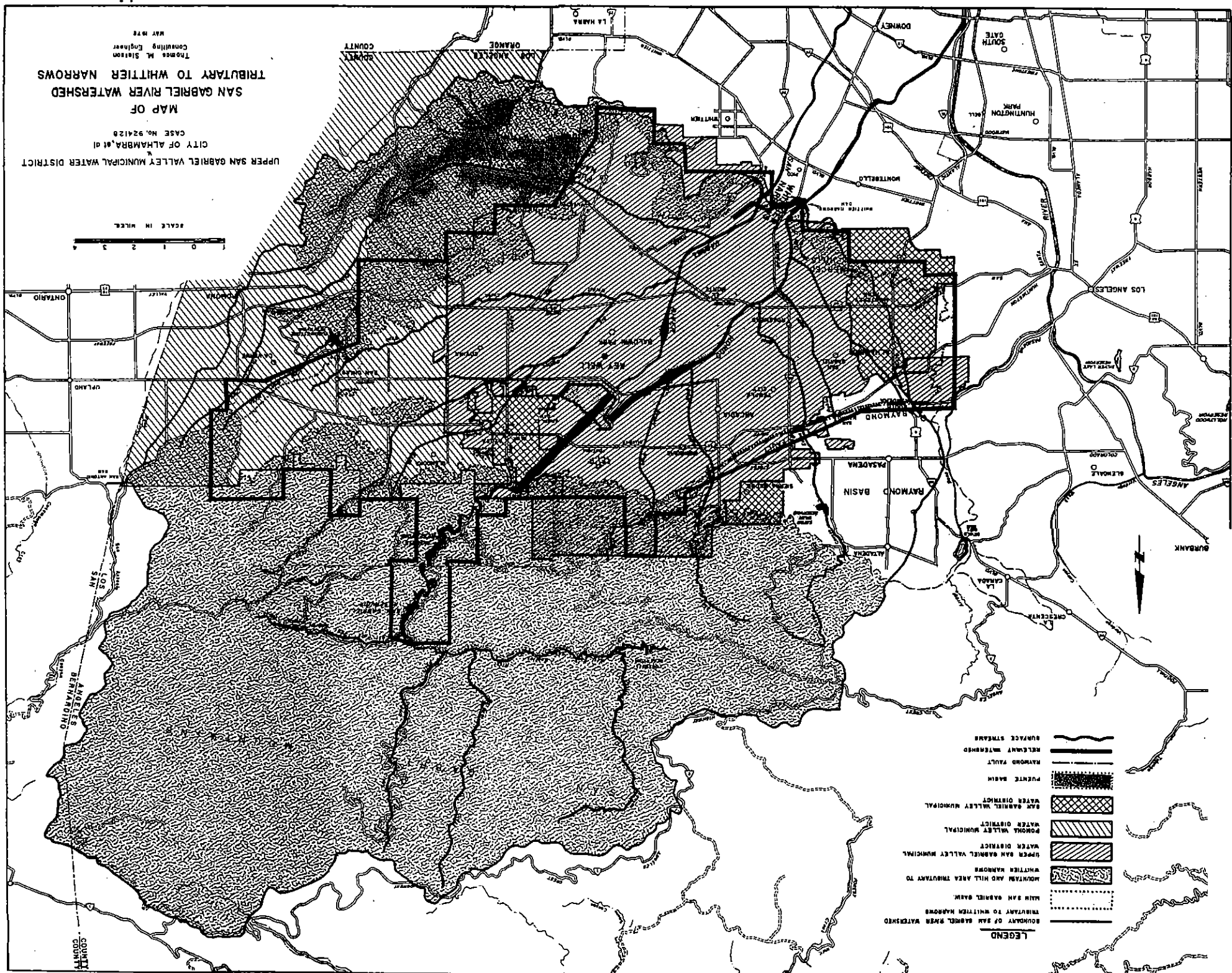
5 59. Water Rights Permits. (Prior Judgment Section 51)
6 Nothing herein shall be construed as affecting the relative
7 rights and priorities between MWD and San Gabriel Valley
8 Protective Association under State Water Rights Permits Nos.
9 7174 and 7175, respectively.

10 60. Costs. (Prior Judgment Section 52) No party shall
11 recover any costs in this proceeding from any other party.

12 61. Entry of Judgment. (New) The Clerk shall enter this
13 Judgment.

14 DATED: August 24, 1989.

15 s/ Florence T. Pickard
16 Florence T. Pickard, Judge
17 Specially Assigned
18
19
20
21
22
23
24
25
26
27
28



UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT
CITY OF ALHAMBRA, et al
CASE NO. 924128
MAP OF
SAN GABRIEL RIVER WATERSHED
TRIBUTARY TO WHITTIER NARROWS
THOMAS M. SIMMONS
Consulting Engineer
MAY 1978

SCALE IN MILES
0 1 2 3 4

- LEGEND
- BOUNDARY OF SAN GABRIEL RIVER WATERSHED TRIBUTARY TO WHITTIER NARROWS
 - MAIN SAN GABRIEL BASIN
 - WHITTIER NARROWS
 - UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT
 - POMONA VALLEY MUNICIPAL WATER DISTRICT
 - SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT
 - PUEBLO BASIN
 - RAYMOND FAULT
 - RELICTANT WATERSHED
 - SURFACE STREAMS

Exhibit "B"

BOUNDARIES OF RELEVANT WATERSHED

The following described property is located in Los Angeles County, State of California:

Beginning at the Southwest corner of Section 14, Township 1 North, Range 11 West, San Bernardino Base and Meridian;

Thence Northerly along the West line of said Section 14 to the Northwest corner of the South half of said Section 14;

Thence Easterly along the North line of the South half of Section 14 to the East line of said Section 14;

Thence Northerly along the East line of said Section 14, Township 1 North, Range 11 West and continuing Northerly along the East line of Section 11 to the Northeast corner of said Section 11;

Thence Easterly along the North line of Section 12 to the Northeast corner of said Section 12;

Thence Southerly along the East line of said Section 12 and continuing Southerly along the East line of Section 13 to the Southeast corner of said Section 13, said corner being also the Southwest corner of Section 18, Township 1 North, Range 10 West;

Thence Easterly along the South line of Sections 18, 17, 16 and 15 of said Township 1 North, Range 10 West to the Southwest corner of Section 14;

Thence Northerly along the West line of Section 14 to the Northwest corner of the South half of Section 14;

Thence Easterly along the North line of the South half of Section 14 to the East line of said section;

Thence Northerly along the East line of said Section 14, and continuing Northerly along the West line of Section 12 of said Township 1 North, Range 10 West to the North line of said Section 12;

Thence Easterly along the North line of said Section 12, to the Northeast corner of said Section 12, said corner being also the Southwest corner of Section 6, Township 1 North, Range 9 West;

Thence Northerly along the West line of said Section 6 and continuing Northerly along West line of Sections 31 and 30, Township 2 North, Range 9 West to the Westerly prolongation of the North line of said Section 30;

Thence Easterly along said Westerly prolongation of the North line of said Section 30 and continuing Easterly along the North line of Section 29 to the Northeast corner of said Section 29;

Thence Southerly along the East line of said Section 29 and continuing Southerly along the East line of Section 32, Township 2 North, Range 9 West, and thence continuing Southerly along the East line of Section 5, Township 1 North, Range 9 West to the Southeast corner of said Section 5;

Thence Westerly along the South line of said Section 5 to the Southwest corner of said Section 5, said point being also the Northwest corner of Section 8;

Thence Southerly along the West line of said Section 8 and continuing Southerly along the West line of Section 17, to the Southwest corner of said Section 17, said corner being also the Northwest corner of Section 20;

Thence Easterly along the North line of Sections 20 and 21 to the Northwest corner of Section 22, said corner being also the Southwest corner of Section 15;

Thence Northerly along the West line of said Section 15 to the Northwest corner of the South half of said Section 15;

Thence Easterly along the North line of said South half of Section 15 to the Northeast corner of said South half of Section 15;

Thence Southerly along the East line of Section 15 and continuing Southerly along the East line of Section 22 to the Southeast corner of said Section 22, said point being also the Southwest corner of Section 23;

Thence Easterly along the South line of Sections 23 and 24 to the East line of the West half of said Section 24;

Thence Northerly along said East line of the West half of Section 24 to the North line thereof;

Thence Easterly along said North line of Section 24 to the Northeast corner thereof, said point also being the Northwest corner of Section 19, Township 1 North, Range 8 West;

Thence continuing Easterly along the North line of Section 19 and Section 20 of said Township 1 North, Range 8 West to the Northeast corner of said Section 20;

Thence Southerly along the East line of Sections 20, 29 and 32 of said Township 1 North, Range 8 West to the Southeast corner of said Section 32;

Thence Westerly along the South line of Section 32 to the Northwest corner of the East half of Section 5, Township 1 South, Range 8 West;

Thence Southerly along the West line of the East half of said Section 5 to the South line of said Section 5;

Thence West to the East line of the Northerly prolongation of Range 9 West;

Thence South 67° 30' West to an intersection with the Northerly prolongation of the West line of Section 27, Township 1 South, Range 9 West;

Thence Southerly along the Northerly prolongation of said West line of Section 27 and continuing Southerly along the West line of Section 27 to the Southwest corner of said Section 27, said point being also the Southeast corner of Section 28;

Thence Westerly along the South line and Westerly projection of the South line of said Section 28 to the Northerly prolongation of the West line of Range 9 West; ✓

Thence Southerly along said prolongation of the West line of Range 9 West to the Westerly prolongation of the North line of Township 2 South;

Thence Westerly along said Westerly prolongation of the North line of Township 2 South, a distance of 8,500 feet; ✓

Thence South a distance of 4,500 feet; ✓

Thence West a distance of 10,700 feet;

Thence South 29° West to an intersection with the Northerly prolongation of the West line of Section 20, Township 2 South, Range 10 West;

Thence Southerly along said Northerly prolongation of the West line of said Section 20 and continuing Southerly along the West line of Section 20 to the Southwest corner of said Section 20;

Thence South a distance of 2,000 feet;

Thence West a distance of two miles, more or less, to an intersection with the East line of Section 26, Township 2 South, Range 11 West;

Thence Northerly along said East line of Section 26 and continuing Northerly along the East line of Section 23, Township 2 South, Range 11 West to the Northeast corner of said Section 23;

Thence Westerly along the North line of said Section 23 to the Northwest corner thereof, said point being also the Southeast corner of Section 15, Township 2 South, Range 11 West;

Thence Northerly and Westerly along the East and North lines, respectively, of said Section 15, Township 2 South, Range 11 West, to the Northwest corner thereof;

Thence continuing Westerly along the Westerly prolongation of said North line of Section 15, Township 2 South, Range 11 West to an intersection with a line parallel to and one mile East of the West line of Range 11 West;

Thence Northerly along said parallel line to an intersection with the Northerly boundary of the City of Pico Rivera as said City of Pico Rivera existed on July 17, 1970;

Thence Westerly along said City boundary to an intersection with the East line of Range 12 West;

Thence Northerly along said East line of Range 12 West to the North line of Township 2 South;

Thence Westerly along the North line of Township 2 South to an intersection with the Southerly prolongation of the East line of the West half of Section 26, Township 1 South, Range 12 West;

Thence Northerly along said Southerly prolongation of said East line of the West half of said Section 26 to the Southeast corner of said West half;

Thence Westerly along the South line of Sections 26, 27 and 28, Township 1 South, Range 12 West, to the Southeast corner of Section 29, Township 1 South, Range 12 West;

Thence Northerly along the East line of said Section 29 to the Northeast corner of the South half of said Section 29;

Thence Westerly along the North line of the South half of said Section 29 to the Northwest corner thereof;

Thence Northerly along the West line of Sections 29, 20, 17 and 8, Township 1 South, Range 12 West;

Thence continuing Northerly along the Northerly prolongation of the West line of Section 8, Township 1 South, Range 12 West to an intersection with the North line of Township 1 South;

Thence Easterly along said North line of Township 1
South to the Northeast corner of Section 3, Township 1 South,
Range 12 West;

Thence North $64^{\circ} 30'$ East to an intersection with the
West line of Section 23, Township 1 North, Range 11 West;

Thence Northerly along the West line of said Section 23
to the Northwest corner thereof, said point being the
Southwest corner of Section 14, Township 1 North, Range 11
West and said point being also the point of beginning.

Exhibit "C"

TABLE
SHOWING BASE
ANNUAL DIVERSION
RIGHTS OF CERTAIN
DIVERTERS

	Base Annual Diversion Right <u>Acre-Feet</u>
Covell, Ralph (Successor to Rittenhouse, Catherine and Rittenhouse, James)	2.12
Maddock, A. G.	3.40
Rittenhouse, Catherine (Transferred to Covell, Ralph)	0
Rittenhouse, James (Transferred to Covell, Ralph)	0
Ruebhausen, Arline (Held in common with Ruebhausen, Victor) (Transferred to City of Glendale)	0
Ruebhausen, Victor (See Ruebhausen, Arline, above)	0
TOTAL	<u>5.52</u>

Exhibit "D"

TABLE
SHOWING PRESCRIPTIVE PUMPING RIGHTS
AND PUMPER'S SHARE OF EACH PUMPER
AS OF JUNE, 1988

<u>Pumper</u>	<u>Prescriptive Pumping Right Acre-feet</u>	<u>Pumper's Share Percent (%)</u>
Adams Ranch Mutual Water Company	100.00	0.05060
A & E Plastik Pak Co., Inc. (Transferred to Industry Properties, Ltd.)	0	0
Alhambra, City of	8,812.05	4.45876
Amarillo Mutual Water Company	709.00	0.35874
Anchor Plating Co., Inc. (Successor to Bodger & Sons) (Transferred to Crown City Plating Co.)	0	0
Anderson, Ray L. and Helen T., Trustees (Successor to Covina-Valley Unified School District)	50.16	0.02538
Andrade, Marcario and Consuelo; and Andrade, Robert and Jayne (Successor to J. F. Isbell Estate, Inc.)	8.36	0.00423
Arcardia, City of (Successor to First National Finance Corporation) (Transferred to City of Monrovia)	9,252.00 60.90 <u>951.00</u>	4.68137 0.03081 <u>0.48119</u>
	8,361.90	4.23099
Associated Southern Investment Company (Transferred to Southern California Edison Company)	0	0
AZ-Two, Inc. (Lessee of Southwestern Portland Cement Co.)	0	0
Azusa, City	3,655.99	1.84988
Azusa-Western Inc. (Transferred to Southwestern Portland Cement Co.)	0	0
Bahnsen & Beckman Ind., Inc. (Transferred to Woodland, Richard)	0	0

<u>Pumper</u>	<u>Prescriptive Pumping Right Acre-feet</u>	<u>Pumper's Share %</u>
Bahnsen, Betty M. (Transferred to Dawes, Mary Kay)	0	0
Baldwin Park County Water District (See Valley County Water District)	-	-
Banks, Gale C. (Successor to Doyle, Mr. and Mrs.; and Madruga, Mr. and Mrs.)	50.00	0.02530
Base Line Water Company	430.20	0.21767
Beverly Acres Mutual Water Company	93.00	0.04706
Birenbaum, Max (Held in common with Birenbaum, Sylvia; Schneiderman, Alan; Schneiderman, Lydia; Wigodsky, Bernard; Wigodsky, Estera) (Transferred to City of Whittier)	0	0
Birenbaum, Sylvia (See Birenbaum, Max)	-	-
) Blue Diamond Concrete Materials Div., The Flintkote Company (Transferred to Sully-Miller Contracting Co.)	0	0
Bodger & Sons DBA Bodger Seeds Ltd. (Transferred to Anchor Plating Co., Inc.)	0	0
Botello Water Company	0	0
Burbank Development Company	50.65	0.02563
Cadway, Inc. (Successor to: Corcoran, Jack S. and R. L.) Corcoran, Jack S. and R. L.)	100.00 <u>100.00</u> 200.00	0.05060 <u>0.05060</u> 0.10120
Cal Fin (Transferred to Suburban Water Systems)	0	0
California-American Water Company (San Marino System)	7,868.70	3.98144
California Country Club	0	0

<u>Pumper</u>	<u>Prescriptive Pumping Right Acre-feet</u>	<u>Pumper's Share %</u>
California Domestic Water Company	11,024.82	5.57839
(Successor to:		
Cantrill Mutual Water Company	42.50	0.02150
Industry Properties, Ltd.	73.50	0.03719
Modern Accent Corporation	256.86	0.12997
Fisher, Russell)	<u>19.00</u>	<u>0.00961</u>
	11,416.68	5.77666
California Materials Company	0	0
Cantrill Mutual Water Company		
(Transferred to California Domestic Water Co.)	0	0
Cedar Avenue Mutual Water Company	121.10	0.06127
Champion Mutual Water Company	147.68	0.07472
Chronis, Christine		
(See Polopolus, et al)	-	-
Clayton Manufacturing Company	511.80	0.25896
Collison, E. O.	0	0
Comby, Erma M.		
(See Wilmott, Erma M.)	-	-
Conrock Company		
(Formerly Consolidated Rock Products Co.)	1,465.35	0.74144
(Successor to Manning Bros. Rock & Sand Co.)	<u>328.00</u>	<u>0.16596</u>
	1,793.35	0.90740
Consolidated Rock Products Co.		
(See Conrock Company)	-	-
Corcoran, Jack S.		
(Held in common with Corcoran, R. L.)		
(Transferred to:		
Cadway, Inc.	747.00	0.37797
Cadway, Inc.	100.00	0.05060
	<u>100.00</u>	<u>0.05060</u>
	547.00	0.27677
Corcoran, R. L. (See Corcoran, Jack S.)	-	-
County Sanitation District No. 18 of Los Angeles County	4.50	0.00228

<u>Pumper</u>	<u>Prescriptive Pumping Right Acre-feet</u>	<u>Pumper's Share %</u>
Covell, et al. (Successor to Rittenhouse, Catherine and Rittenhouse, James) (Held in common with Jobe, Darr; Goedert, Lillian E.; Goedert, Marion W.; Lakin, Kendall R.; Lakin, Kelly R.; Snyder, Harry)	111.05	0.05619
Covina, City of (Transferred to Covina Irrigating Company)	2,507.89	1.26895
(Transferred to Covina Irrigating Company)	1,734.00	0.87737
	<u>300.00</u>	<u>0.15179</u>
	473.89	0.23979
Covina-Valley Unified School District (Transferred to Anderson, Ray)	0	0
Crevolin, A. J.	2.25	0.00114
Crocker National Bank, Executor of the Estate of A. V. Handorf (Transferred to Modern Accent Corp.)	0	0
Cross Water Company (Transferred to City of Industry)	0	0
Crown City Plating Company (Successor to Anchor Plating Co., Inc.)	190.00	0.09614
	<u>10.00</u>	<u>0.00506</u>
	200.00	0.10120
Davidson Optronics, Inc.	22.00	0.01113
Dawes, Mary Kay (Successor to Bahnsen, Betty M.)	441.90	0.22359
Del Rio Mutual Water Company	199.00	0.10069
Denton, Kathryn W., Trustee for San Jose Ranch Company (Transferred to White, June G., Trustee of the June G. White Share of the Garnier Trust)	0	0
Doyle, Mr. and Mrs.; and Madruga, Mr. and Mrs. (Successor to Sawpit Farms, Ltd.) (Transferred to Banks, Gale C.)	0	0
Driftwood Dairy	163.80	0.08288
Duhalde, L. (Transferred to El Monte Union High School District)	0	0

<u>Pumper</u>	<u>Prescriptive Pumping Right Acre-feet</u>	<u>Pumper's Share %</u>
Dunning, George (Held in common with Dunning, Vera H.) (Successor to Vera H. Dunning)	324.00	0.16394
Dunning, Vera H. (Transferred to George Dunning)	-	-
East Pasadena Water Company, Ltd.	1,407.69	0.71227
Eckis, Rollin (Successor to Sawpit Farms, Ltd.) (Transferred to City of Monrovia)	0	0
El Encanto Properties (Transferred to La Puente Valley County Water District)	0	0
El Monte, City of	2,784.23	1.40878
El Monte Cemetary Association	18.50	0.00936
El Monte Union High School District (Successor to Duhalde, L.) (Transferred to City of Whittier)	0	0
Everett, Mrs. Alda B. (Held in common with Everett, W. B., Executor of the Estate of I. Worth Everett)	0	0
Everett, W. B., Executor of the Estate of I. Worth Everett (See Everett, Mrs. Alda B.)	-	-
Faix, Inc. (Successor to Frank F. Pellissier & Sons, Inc.) (Transferred to Faix, Ltd.)	0	0
Faix, Ltd. (Successor to Faix, Inc.)	6,490.00	3.28384
First National Finance Corporation (Transferred to City of Arcadia)	0	0
Fisher, Russell (Held in common with Hauch, Edward and Warren, Clyde) (Transferred to California Domestic Water Company)	0	0

<u>Pumper</u>	<u>Prescriptive Pumping Right Acre-feet</u>	<u>Pumper's Share %</u>
Frank F. Pellissier & Sons, Inc. (Transferred to Faix, Inc.)	0	0
Fruit Street Water Company (Transferred to: Gifford, Brooks, Jr. City of La Verne)	0	0
Gifford, Brooks, Jr. (Successor to: Fruit Street Water Co., Mission Gardens Mutual Water Company) (Transferred to City of Whittier)	0	0
Gilkerson, Frank B. (Transferred to Jobe, Darr)	-	-
Glendora Unified High School District (Transferred to City of Glendora)	0	0
Goedert, Lillian E. (See Covell, et al)	-	-
Goedert, Marion W. (See Covell, et al)	-	-
Graham, William (Transferred to Darr Jobe)	-	-
Green, Walter	71.70	0.03628
Grizzle, Lissa B. (Held in common with Grizzle, Mervin A.; Wilson, Harold R.; Wilson, Sarah C.) (Transferred to City of Whittier)	0	0
Grizzle, Mervin A. (See Grizzle, Lissa B.)	0	0
Hansen, Alice	0.75	0.00038
Hartley, David	0	0
Hauch, Edward (See Fisher, Russell)	0	0
Hemlock Mutual Water Company	166.00	0.08399

<u>Pumper</u>	<u>Prescriptive Pumping Right Acre-feet</u>	<u>Pumper's Share %</u>
Hollenbeck Street Water Company (Transferred to Suburban Water Systems)	0	0
Hunter, Lloyd F. (Successor to R. Wade)	4.40	0.00223
Hydro-Conduit Corporation	0	0
Industry Waterworks System, City of (Successor to Cross Water Company)	1,103.00	0.55810
Industry Properties, Ltd. (Successor to A & E Plastik Pak Co., Inc.) (Transferred to California Domestic Water Co.)	0	0
J. F. Isbell Estate, Inc. (Transferred to Andrade, Macario and Consuelo; and Andrade, Robert and Jayne)	0	0
Jerris, Helen (See Polopolus, et al)	-	-
Jobe, Darr (See Covell, et al)	-	-
Kirklen Family Trust (Formerly Kirklen, Dawn L.) (Held in common with Kirklen, William R.) (Successor to San Dimas-La Verne Recreational Facilities Authority)	375.00 <u>62.50</u> 437.50	0.18974 <u>0.03162</u> 0.22136
Kirklen, Dawn L. (See Kirklen Family Trust)	-	-
Kirklen, William R. (See Kirklen, Dawn L.)	-	-
Kiyan, Hideo (Held in common with Kiyan, Hiro)	30.00	0.01518
Kiyan, Hiro (See Kiyan, Hideo)	-	-
Knight, Kathryn M. (Successor to William Knight)	227.88	0.11530
Knight, William (Transferred to Kathryn M. Knight)	0	0

<u>Pumper</u>	<u>Prescriptive Pumping Right Acre-feet</u>	<u>Pumper's Share %</u>
Lakin, Kelly R. (See Covell, et al)	-	-
Lakin, Kendall R. (See Covell, et al)	-	-
Landeros, John	0.75	0.00038
La Grande Source Water Company (Transferred to Suburban Water Systems)	0	0
Lang, Frank (Transferred to San Dimas-La Verne Recreational Facilities Authority)	0	0
La Puente Cooperative Water Company (Transferred to Suburban Water Systems)	0	0
La Puente Valley County Water District (Successor to El Encanto Properties)	1,097.00 <u>33.40</u> 1,130.40	0.55507 <u>0.01690</u> 0.57197
La Verne, City of (Successor to Fruit Street Water Co.)	250.00 <u>105.71</u> 355.71	0.12650 <u>0.05349</u> 0.17999
Lee, Paul M. and Ruth A.; Nasmyth, Virrginia; Nasmyth, John	0	0
Little John Dairy	0	0
Livingston-Graham, Inc.	1,824.40	0.92312
Los Flores Mutual Water Company (Transferred to City of Monterey Park)	0	0
Loucks, David	3.00	0.00152
Manning Bros. Rock & Sand Co. (Transferred to Conrock Company)	0	0
Maple Water Company	118.50	0.05996
Martinez, Frances Mercy (Held in common with Martinez, Jaime)	0.75	0.00038
Martinez, Jaime (See Martinez, Frances Mercy)	-	-
Massey-Ferguson Company	0	0

<u>Pumper</u>	<u>Prescriptive Pumping Right Acre-feet</u>	<u>Pumper's Share %</u>
Miller Brewing Company	111.01	0.05617
(Successor to:		
Maechtlen, Estate of J. J.	151.50	0.07666
Phillips, Alice B., et al)	<u>50.00</u>	<u>0.02530</u>
	312.51	0.15813
Mission Gardens Mutual Water Company		
(Transferred to Gifford, Brooks, Jr.)	0	0
Modern Accent Corporation		
(Successor to Crocker National Bank,		
Executor of the Estate of A. V. Handorf)		
(Transferred to California Domestic Water Co.)	0	0
Monterey Park, City of	6,677.48	3.37870
(Successor to Los Flores Mutual Water Co.)	<u>26.60</u>	<u>0.01346</u>
	6,704.08	3.39216
Murphy Ranch Mutual Water Company		
(Transferred to Southwest Suburban Water)	0	0
Namimatsu Farms		
(Transferred to California Cities Water Company)	0	0
Nick Tomovich & Sons	0.02	0.00001
No. 17 Walnut Place Mutual Water Co.		
(Transferred to San Gabriel Valley		
Water Company)	0	0
Orange Production Credit Association	0	0
Owl Rock Products Co.	715.60	0.36208
Pacific Rock & Gravel Co.		
(Transferred to:		
City of Whittier		
Rose Hills Memorial Park Association)	0	0
Park Water Company		
(Transferred to Valley County Water District)	0	0
Penn, Margaret		
(See Polopolus, et al)	-	-
Pico County Water District	0.75	0.00038
Polopolus, John		
(See Polopolus, et al)	-	-

<u>Pumper</u>	<u>Prescriptive Pumping Right Acre-feet</u>	<u>Pumper's Share %</u>
Polopolus, et al (Successor to Polopolus, Steve) (Held in common with Chronis, Christine; Jerris, Helen; Penn, Margaret; Polopolus, John)	22.50	0.01138
Polopolus, Steve (Transferred to Polopolus, et al)	-	-
Rados, Alexander (Held in common with Rados, Stephen and Rados, Walter)	43.00	0.02176
Rados, Stephen (See Rados, Alexander)	-	-
Rados, Walter (See Rados, Alexander)	-	-
Richwood Mutual Water Company	192.60	0.09745
Rincon Ditch Company	628.00	0.31776
Rincon Irrigation Company	314.00	0.15888
Rittenhouse, Catherine (Transferred to Covell, Ralph)	0	0
Rittenhouse, James (Transferred to Covell, Ralph)	0	0
Rose Hills Memorial Park Association (Successor to Pacific Rock & Gravel Co.)	594.00 <u>200.00</u> 794.00	0.30055 <u>0.10120</u> 0.40175
Rosemead Development, Ltd. (Successor to Thompson, Earl W.)	1.00	0.00051
Rurban Homes Mutual Water Company	217.76	0.11018
Ruth, Roy	0.75	0.00038
San Dimas-La Verne Recreational Facilities Authority (Successor to Lang, Frank) (Transferred to Kirklen, Dawn L. and William R.)	0	0
San Gabriel Country Club	286.10	0.14476
San Gabriel County Water District	4,250.00	2.15044

<u>Pumper</u>	<u>Prescriptive Pumping Right Acre-feet</u>	<u>Pumper's Share %</u>
San Gabriel Valley Municipal Water District	0	0
San Gabriel Valley Water Company	16,659.00	8.42920
(Successor to:		
Vallecito Water Co.	2,867.00	1.45066
No. 17 Walnut Place Mutual Water Co.)	<u>21.50</u>	<u>0.01088</u>
	19,547.50	9.89074
Sawpit Farms, Limited		
(Transferred to:		
Eckis, Rollin		
Doyle and Madruga)	0	0
Schneiderman, Alan		
(See Birenbaum, Max)	-	-
Schneiderman, Lydia		
(See Birenbaum, Max)	-	-
Security Pacific National Bank,		
Co-Trustee for the Estate of Winston		
F. Stooddy		
(See Stooddy, Virginia A.)		
(Transferred to City of Whittier)	0	0
Sierra Madre, City of	0	0
Sloan Ranches	129.60	0.06558
Smith, Charles	0	0
Snyder, Harry		
(See Covell, et al)	-	-
Sonoco Products Company	311.60	0.15766
South Covina Water Service	992.30	0.50209
Southern California Edison Company	155.25	0.07855
(Successor to: Associated		
Southern Investment Company)	<u>16.50</u>	<u>0.00835</u>
	171.75	0.08690
Southern California Water Company,		
San Gabriel Valley District	5,773.00	2.92105
South Pasadena, City of	3,567.70	1.80520
Southwest Suburban Water		
(See Suburban Water Systems)	-	-

<u>Pumper</u>	<u>Prescriptive Pumping Right Acre-feet</u>	<u>Pumper's Share %</u>
Southwestern Portland Cement Company (Successor to Azusa Western, Inc.)	742.00	0.37544
Speedway 605, Inc.	0	0
Standard Oil Company of California	2.00	0.00101
Sterling Mutual Water Company	120.00	0.06072
Stoody, Virginia A., Co-Trustee for the Estate of Winston F. Stoody (See Security Pacific National Bank, Co-Trustee)	-	-
Suburban Water Systems (Formerly Southwest Suburban Water) (Successor to:	20,462.47	10.35370
Hollenbeck Street Water Company	646.39	0.32706
La Grande Source Water Company	1,078.00	0.54545
La Puente Cooperative Water Co.	1,210.90	0.61270
Valencia Valley Water Company	651.50	0.32965
Victoria Mutual Water Company	469.60	0.23761
Cal Fin	118.10	0.05976
Murphy Ranch Mutual Water Co.	<u>223.23</u>	<u>0.11295</u>
	24,860.19	12.57888
Sully-Miller Contracting Company (Successor to Blue Diamond Concrete Materials Division, The Flintkote Co.)	1,399.33	0.70804
Sunny Slope Water Company	2,228.72	1.12770
Taylor Herb Garden (Transferred to Covina Irrigating Company)	0	0
Texaco, Inc.	50.00	0.02530
Thompson, Earl W. (Held in common with Thompson, Mary) (Transferred to Rosemead Development, Ltd.)	0	0
Thompson, Mary (See Thompson, Earl W.)	-	-
Tyler Nursery	3.21	0.00162
United Concrete Pipe Corporation (See U. S. Pipe & Foundry Company)	-	-

<u>Pumper</u>	<u>Prescriptive Pumping Right Acre-feet</u>	<u>Pumper's Share %</u>
U. S. Pipe & Foundry Company (Formerly United Concrete Pipe Corporation)	376.00	0.19025
Valencia Heights Water Company	861.00	0.43565
Valencia Valley Water Company (Transferred to Suburban Water Systems)	0	0
Vallecito Water Company (Transferred to San Gabriel Valley Water Company)	0	0
Valley County Water District (Formerly Baldwin Park County Water District) (Successor to Park Water Company)	5,775.00 <u>184.01</u> 5,959.01	2.92206 <u>0.09311</u> 3.01517
Valley Crating Company	0	0
Valley View Mutual Water Company	616.00	0.31169
Via, H. (See Via, H., Trust of)	-	-
Via, H., Trust of (Formerly Via, H.)	46.20	0.02338
Victoria Mutual Water Company (Transferred to Suburban Water Systems)	0	0
Wade, R. (Transferred to Lloyd F. Hunter)	0	0
Ward Duck Company	1,217.40	0.61599
Warren, Clyde (See Fisher, Russell)	-	-
W. E. Hall Company	0.20	0.00010
White, June G., Trustee of the June G. White Share of the Garnier Trust (Successor to Denton, Kathryn W., Trustee for the San Jose Ranch Company)	185.50	0.09386

<u>Pumper</u>	<u>Prescriptive Pumping Right Acre-feet</u>	<u>Pumper's Share %</u>
Whittier, City of	7,620.23	3.85572
(Successor to:		
Grizzle, Lissa B.	184.00	0.09310
Pacific Rock and Gravel Co.)	208.00	0.10524
Security Pacific National Bank,		
Co-Trustee for the Estate of Winston F. Stooddy	38.70	0.01958
El Monte Union High School District	16.20	0.00820
Gifford, Brooks, Jr.	198.25	0.10031
Birenbaum, Max)	6.00	0.00304
	8,271.38	4.18519
Wigodsky, Bernard		
(See Birenbaum, Max)	-	-
Wigodsky, Estera		
(See Birenbaum, Max)	-	-
Wilmott, Erma M.		
(Formerly Comby, Erma M.)	0.75	0.00038
Wilson, Harold R.		
(See Grizzle, Lissa B.)	-	-
) Wilson, Sarah C.		
(See Grizzle, Lissa B.)	-	-
Woodland, Frederick G.	-	-
Woodland, Richard		
(Successor to: Bahnsen and		
Beckman Ind., Inc.)	840.50	0.42528
Totals for Exhibit "D"	155,800.68	78.83276
	41,833.75	21.14724
Totals from Exhibit "E"	38,626.25	19,54431
GRAND TOTALS	197,634.43	100.00000

TABLE
SHOWING PRODUCTION RIGHTS
OF EACH
INTEGRATED PRODUCER
AS OF JUNE 1988

<u>Party</u>	<u>Diversion Component Acre-feet</u>	<u>Prescriptive Pumping Component Acre-feet</u>	<u>Pumping Component Share Percent (%)</u>
Azusa Agricultural Water Company	1,000.00	1,732.20	0.87647
Azusa Foot-Hill Citrus Water Company (Transferred to Monrovia Nursery Company)	0	0	0
Azusa Valley Water Company	2,422.00	8,274.00	4.18652
California-American Water Company (Duarte System)	1,672.00	3,649.00	1.84634
California Cities Water Company (See Southern California Water Company, San Dimas District)	-	-	-
Covina Irrigating Company (Successor to: City of Covina, City of Covina, and Taylor Herb Garden)	2,514.00	4,140.00	2.09478
		1,734.00	0.87737
		300.00	0.15179
		6.00	0.00304
	2,514.00	6,180.00	3.12698
Glendora, City of (Successor to: Maechtlen, Estate of J. J., Maechtlen, Trust of P. A., Ruebhausen, Arline, and Glendora Unified High School District)	17.00	8,258.00	4.17842
		150.00	0.07590
		50.00	0.02530
	18.34		
		9.00	0.05009
	35.34	8,557.00	4.32971
Los Angeles, County of	310.00	3,721.30	1.88292
Maechtlen, Estate of J. J. (Transferred to: City of Glendora Miller Brewing Company)	0	301.50	0.15256
		-150.00	-0.07590
		-151.50	-0.07666
	0	0	0

<u>Party</u>	<u>Diversion Componet Acre-feet</u>	<u>Prescriptive Pumping Component Acre-feet</u>	<u>Pumping Component Share %</u>
Maechtlen, Estate of J. J.	1.49	0	0
Maechtlen, Trust of P. A.	0.50	100.50	0.05085
(Transferred to: City of Glendora		-50.00	-0.02530
Alice B. Phillips, et al)	<u>-0.50</u>	<u>-50.50</u>	<u>-0.02555</u>
	0	0	0
The Metropolitan Water District of Southern California	9.59	165.00	0.08349
Monrovia, City of	1,098.00	5,042.22	2.55129
(Sucessor to: Eckis, Rollin		123.00	0.06224
City of Arcadia)		<u>951.00</u>	<u>0.48119</u>
	<u>1,098.00</u>	<u>6,116.22</u>	<u>3.09472</u>
Monrovia, Nursery Company	239.50	0	0
(Successor to: Azusa Foot-Hill Citrus Co.)	718.50	0	
Phillips, Alice B., et al			
(Successor to: Maechtlen, Trust of P. A.)	0.50	50.50	0.02530
(Transferred to: Miller Brewing Company)		<u>-50.00</u>	<u>-0.02530</u>
	<u>0.50</u>	<u>0.50</u>	<u>0.00025</u>
Southern California Water Company (San Dimas Dist.)	500.00	3,242.53	1.64076
(Formerly California Cities Water Company)			
(Successor to: Namimatsu Farms)		<u>196.00</u>	<u>0.09917</u>
	<u>500.00</u>	<u>3,438.53</u>	<u>1.73984</u>
TOTAL for Exhibit "E"	<u>10,520.92</u>	<u>41,833.75</u>	<u>21.16724</u>

Exhibit "F"

TABLE SHOWING
SPECIAL CATAGORY RIGHTS

<u>PARTY</u>	<u>Nature of Right</u>
The Metropolitan Water District of Southern California	<u>Morris Reservoir Storage and Withdrawal</u> (a) A right to divert, store and use San Gabriel River Water, pursuant to Permit No. 7174. (b) Prior and paramount right to divert 72 acre-feet annually to offset Morris Reservoir evaporation and seepage losses and to provide the water supply necessary for presently existing incidental Morris Dam facilities.
Los Angeles County Flood Control District (Now Los Angeles County Department of Public Works)	<u>Puddingstone Reservoir</u> Prior Prescriptive right to divert water from San Dimas Wash for storage in Puddingstone Reservoir in quantities sufficient to offset annual evaporation and seepage losses of the reservoir at approximate elevation 942.

Exhibit "G"

TABLE SHOWING
NON-CONSUMPTIVE USERS

<u>Party</u>	<u>Nature of Right</u>
Covina Irrigating Company Azusa Valley Water Company Azusa Agricultural Water Co. Azusa Foot-Hill Citrus Co. Monrovia Nursery Company	<u>"Committee-of-Nine" Spreading Right</u> To continue to divert water from the San Gabriel River pursuant to the 1888 Settlement, and to spread in spreading grounds within the Basin all water thus diverted without the right to recapture water in excess of said parties' rights as adjudicated in Exhibit "E".
California-American Water Company (Duarte System)	<u>Spreading Right</u> To continue to divert water from the San Gabriel River pursuant to the 1888 Settlement, and to continue to divert water from Fish Canyon and to spread said waters in its spreading grounds in the Basin without the right to recapture water in excess of said party's rights as adjudicated in Exhibit "E".
City of Glendora	<u>Spreading Right</u> To continue to spread the water of Big and Little Dalton Washes, pursuant to License No. 2592 without the right to recapture water in excess of said party's rights as adjudicated in Exhibit "E".
San Gabriel Valley Protective Association	<u>Spreading Right</u> To continue to spread San Gabriel River water pursuant to License Nos. 9991 and 12,209, without the right to recapture said water.
California Cities Water Company	<u>Spreading Right</u> To continue to spread waters from San Dimas Wash without the right to recapture water in excess of said party's rights as adjudicated in Exhibit "E".
Los Angeles County Flood Control District	<u>Temporary storage</u> of storm flow for regulatory purposes; <u>Spreading</u> and conservation for general benefit in streambeds, reservoirs and spreading grounds without the right to recapture said water. <u>Maintenance and operation</u> of dams and other flood control works.

EXHIBIT "H"

WATERMASTER OPERATING CRITERIA

1. Basin Storage Capacity. The highest water level at the end of a water year during the past 40 years was reached at the Key Well on September 30, 1944 (elevation 316). The State of California, Department of Water Resources, estimates that as of that date, the quantity of fresh water in storage in the Basin was approximately 8,600,000 acre-feet. It is also estimated by said Department that by September 30, 1960, the quantity of fresh water in storage had decreased to approximately 7,900,000 acre-feet (elevation 237) at the Key Well).

The lowest water level at the end of a water year during the past 40 years was reached at the Key Well on September 30, 1965 (elevation 209). It is estimated that the quantity of fresh water in storage in the Basin on that date was approximately 7,700,000 acre-feet.

Thus, the maximum utilization of Basin storage was approximately 900,000 acre-feet, occurring between September 30, 1944, and September 30, 1965 (between elevations 316 and 209 at the Key Well). This is not to say that more than 900,000 acre-feet of storage space below the September 30, 1944 water levels cannot be utilized. However, it demonstrates that pumpers have deepened their wells and lowered their pumps so that such 900,000 acre-feet of storage can be safely and economically utilized.

The storage capacity of the Basin between elevations of 200 and 250 at the Key Well represents a usable volume of approximately 400,000 acre-feet of water.

2. Operating Safe Yield and Spreading. Watermaster in determining Operating Safe Yield and the importation of Replacement Water shall be guided by water level elevations in the Basin. He shall give recognition to, and base his operations on, the following general objectives insofar as practicable:

- (a) The replenishment of ground water from sources of supplemental water should not cause excessively high levels of ground water and such replenishment should not cause undue waste of local water supplies.
- (b) Certain areas within the Basin are not at the present time capable of being recharged with supplemental water. Efforts should be made to provide protection to such areas from excessive ground water lowering either through the "in lieu" provisions of the Judgment or by other means.
- (c) Watermaster shall consider and evaluate the long-term consequences on ground water quality, as well as quantity, in determining and establishing Operating Safe Yield. Recognition shall be given to the enhancement of ground water quality insofar as practicable, especially in the area immediately upstream of Whittier Narrows where degradation of water quality may occur when water levels at the Key Well are maintained at or below elevation 200.
- (d) Watermaster shall take into consideration the comparative costs of supplemental and Make-up Water in determining the savings on a present value basis of temporary or permanent lowering or raising of water levels and other economic data and analyses indicating both the short-term and long-term

) propriety of adjusting Operating Safe Yield in order to derive optimum water levels during any period. Watermaster shall utilize the provisions in the Long Beach Judgment which will result in the least cost of delivering Make-up Water.

3. Replacement Water -- Sources and Recharge Criteria. The following criteria shall control purchase of Replacement Water and Recharge of the Basin by Watermaster.

(a) Responsible Agency From Which to Purchase. Watermaster, in determining the Responsible Agency from which to purchase supplemental water for replacement purposes, shall be governed by the following:

- (1) Place of Use of Water which is used primarily within the Basin or by cities within San Gabriel District in areas within or outside the Basin shall control in determining the Responsible Agency. For purposes of this subparagraph, water supplied through a municipal water system which lies chiefly within the Basin shall be deemed entirely used within the Basin; and
- (2) Place of production of water shall control in determining the Responsible Agency as to water exported from the Basin, except as to use within San Gabriel District.

Any Responsible Agency may, at the request of Watermaster, waive its right to act as the source for such supplemental water, in which case Watermaster shall be free to purchase such water from the remaining Responsible Agencies which are the most beneficial and appropriate sources; provided, however, that a Responsible Agency shall not

authorize any sale of water in violation of the California Constitution.

(b) Water Quality. Watermaster shall purchase the best quality of supplemental water available for replenishment of the Basin, pursuant to subsection (a) hereof.

(c) Reclaimed Water. It is recognized that the technology and economic and physical necessity for utilization of reclaimed water is increasing. The purchase of reclaimed water in accordance with the Long Beach Judgment to satisfy the Make-up Obligation is expressly authorized. At the same time, water quality problems involved in the reuse of water within the Basin pose serious questions of increased costs and other problems to the pumpers, their customers and all water users. Accordingly, Watermaster is authorized to gather information, make and review studies, and make recommendations on the feasibility of the use of reclaimed water for replacement purposes; provided that no reclaimed water shall be recharged in the Basin by Watermaster without the prior approval of the court, after notice to all parties and hearing thereon.

4. Replacement Assessment Rates. The Replacement Assessment rates shall be in an amount calculated to allow Watermaster to purchase one acre-foot of supplemental water for each acre-foot of excess Production to which such Assessment applies.

EXHIBIT "J"

PUENTE NARROWS AGREEMENT

THIS AGREEMENT is made and entered into as of the 8th day of May, 1972, by and between PUENTE BASIN WATER AGENCY, herein called "Puente Agency", and UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT, herein called "Upper District".

A. RECITALS

1. Puente Agency. Puente Agency is a joint powers agency composed of Walnut Valley Water District, herein called "Walnut District", and Rowland Area County Water District, herein called "Rowland District". Puente Agency is formed for the purpose of developing and implementing a ground water basin management program for Puente Basin. Pursuant to said purpose, said Agency is acting as a representative of its member districts and of the water users and water right claimants therein in the defense and maintenance of their water rights within Puente Basin.

2. Upper District. Upper District is a municipal water district overlying a major portion of the Main San Gabriel Basin. Upper District is plaintiff in the San Gabriel Basin Case, wherein it seeks to adjudicate rights and implement a basin management plan for the Main San Gabriel Basin.

3. Puente Basin is a ground water basin tributary to the Main San Gabriel Basin. Said area was included within the scope of the San Gabriel Basin Case and substantially

all water rights claimants within Puente Basin were joined as defendants therein. The surface contribution to the Main San Gabriel Basin from Puente Basin is by way of the paved flood control channel of San Jose Creek, which passes through Puente Basin from the Pomona Valley area. Subsurface outflow is relatively limited and moves from the Puente Basin to the Main San Gabriel Basin through Puente Narrows..

4. Intent of Agreement. Puente Agency is prepared to assure Upper District that no activity within Puente Basin will hereafter be undertaken which will (1) interfere with surface flows in San Jose Creek, or (2) impair the subsurface flow from Puente Basin to the Main San Gabriel Basin. Walnut District and Rowland District, by operation of law and by express assumption endorsed hereon, assume the covenants of this agreement as a joint and several obligation. Based upon such assurances and the covenants hereinafter contained in support thereof, Upper District consents to the dismissal of all Puente Basin parties from the San Gabriel Basin Case. By reason of said dismissals, Puente Agency will be free to formulate a separate water management program for Puente Basin.

B. DEFINITIONS AND EXHIBITS

5. Definitions. As used in this Agreement, the following terms shall have the meanings herein set forth:

(a) Annual or Year refers to the fiscal year July 1 through June 30.

(b) Base Underflow. The underflow through

Exhibit "J"

Puente Narrows which Puente Agency agrees to maintain, and on which accrued debits and credits shall be calculated.

(c) Make-up Payment. Make-up payments shall be an amount of money payable to the Watermaster appointed in the San Gabriel Basin Case, sufficient to allow said Watermaster to purchase replacement water on account of any accumulated deficit as provided in Paragraph 9 hereof.

(d) Puente Narrows. The subsurface geologic constriction at the downstream boundary of Puente Basin, located as shown on Appendix "B".

(e) Main San Gabriel Basin, the ground water basin shown and defined as such in Exhibit "A" to the Judgment in the San Gabriel Basin Case.

(f) San Gabriel Basin Case. Upper San Gabriel Valley Municipal Water District v. City of Alhambra, et al., L. A. Sup. Ct. No. 924128, filed January 2, 1968.

6. Appendices. Attached hereto and by this reference made a part hereof are the following appendices:

"A" -- Location Map of Puente Basin, showing major geographic, geologic, and hydrologic features.

"B" -- Map of Cross-Section Through Puente Narrows, showing major physical features and location of key wells.

Exhibit "J"

"C" -- Engineering Criteria, being a description of a method of measurement of subsurface outflow to be utilized for Watermaster purposes.

C. COVENANTS

7. Watermaster. There is hereby created a two member Watermaster service to which each of the parties to this agreement shall select one consulting engineer. The respective representatives on said Watermaster shall serve at the pleasure of the governing body of each appointing party and each party shall bear its own Watermaster expense.

a. Organization. Watermaster shall perform the duties specified herein on an informal basis, by unanimous agreement. In the event the two representatives are unable to agree upon any finding or decision, they shall select a third member to act, pursuant to the applicable laws of the State of California. Thereafter, until said issue is resolved, said three shall sit formally as a board of arbitration. Upon resolution of the issue in dispute, the third member shall cease to function further.

b. Availability of Information. Each party hereto shall, for itself and its residents and water users, use its best efforts to furnish all appropriate information to the Watermaster in order that the required determination can be made.

Exhibit "J"

c. Cooperation With Other Watermasters. Watermaster hereunder shall cooperate and coordinate activities with the Watermasters appointed in the San Gabriel Basin Case and in Long Beach v. San Gabriel Valley Water Company, et al.

d. Determination of Underflow. Watermaster shall annually determine the amount of underflow from Puente Basin to the San Gabriel Basin, pursuant to Engineering Criteria.

e. Perpetual Accounting. Watermaster shall maintain a perpetual account of accumulated base underflow, accumulated subsurface flow, any deficiencies by reason of interference with surface flows, and the offsetting credit for any make-up payments. Said account shall annually show the accumulated credit or debit in the obligation of Puente Agency to Upper District.

f. Report. Watermaster findings shall be incorporated in a brief written report to be filed with the parties and with the Watermaster in the San Gabriel Basin Case. Said report shall contain a statement of the perpetual account heretofore specified.

8. Base Underflow. On the basis of a study and review of historic underflow from Puente Basin to the Main San Gabriel Basin, adjusted for the effect of the paved flood control channel and other relevant considerations, it is

Exhibit "J"

mutually agreed by the parties that the base underflow is and shall be 580 acre feet per year, calculated pursuant to Engineering Criteria.

9. Puente Agency's Obligation. Puente Agency covenants, agrees and assumes the following obligation hereunder:

a. Noninterference with Surface Flow. Neither Puente Agency nor any persons or entities within the corporate boundaries of Walnut District or Rowland District will divert or otherwise interfere with or utilize natural surface runoff now or hereafter flowing in the storm channel of San Jose Creek; provided, however, that this covenant shall not prevent the use, under Watermaster supervision, of said storm channel by the Puente Agency or Walnut District or Rowland District for transmission within Puente Agency of supplemental or reclaimed water owned by said entities and introduced into said channel solely for transmission purposes. In the event any unauthorized use of surface flow in said channel is made contrary to the covenant herein provided, Puente Agency shall compensate Upper District by utilizing any accumulated credit or by make-up payment in the same manner as is provided for deficiencies in subsurface outflow from Puente Basin.

b. Subsurface Outflow. To the extent that

Exhibit "J"

the accumulated subsurface outflow falls below the accumulated base underflow and the result thereof is an accumulated deficit in the Watermaster's annual accounting, Puente Agency agrees to provide make-up payments during the next year in an amount not less than one-third of the accumulated deficit.

c. Purchase of Reclaimed Water. To the extent that Puente Agency or Walnut District or Rowland District may hereafter purchase reclaimed water from the facilities of Sanitation District 21 of Los Angeles County, such purchaser shall use its best efforts to obtain waters originating within San Gabriel River Watershed.

10. Puente Basin Parties Dismissal. In consideration of the assumption of the obligation hereinabove provided by Puente Agency, Upper District consents to entry of dismissals as to all Puente Basin parties in San Gabriel Basin Case. This agreement shall be submitted for specific approval by the Court and a finding that it shall operate as full satisfaction of any and all claims by the parties within Main San Gabriel Basin against Puente Basin parties by reason of historic surface and subsurface flow.

IN WITNESS WHEREOF the parties hereto have caused
this Agreement to be executed as of the day and date first
above written.

Approved as to form:

CLAYSON, STARK, ROTHROCK & MANN

By

Charles A. Stark
Attorneys for Puente Agency

PUENTE BASIN AGENCY

By

Edmond M. Biederman
President

Approved as to form:

UPPER SAN GABRIEL VALLEY
MUNICIPAL WATER DISTRICT

By

George B. Arden
Attorney for Upper District

By

Howard H. Hawkins
President

The foregoing agreement is approved and accepted, and
the same is acknowledged as the joint and several obligation
of the undersigned.

Approved as to form:

W. W. Hawley
Attorney for Walnut District

WALNUT VALLEY WATER DISTRICT

By

J. P. Bourdet
J. P. BOURDET
Vice President

Approved as to form:

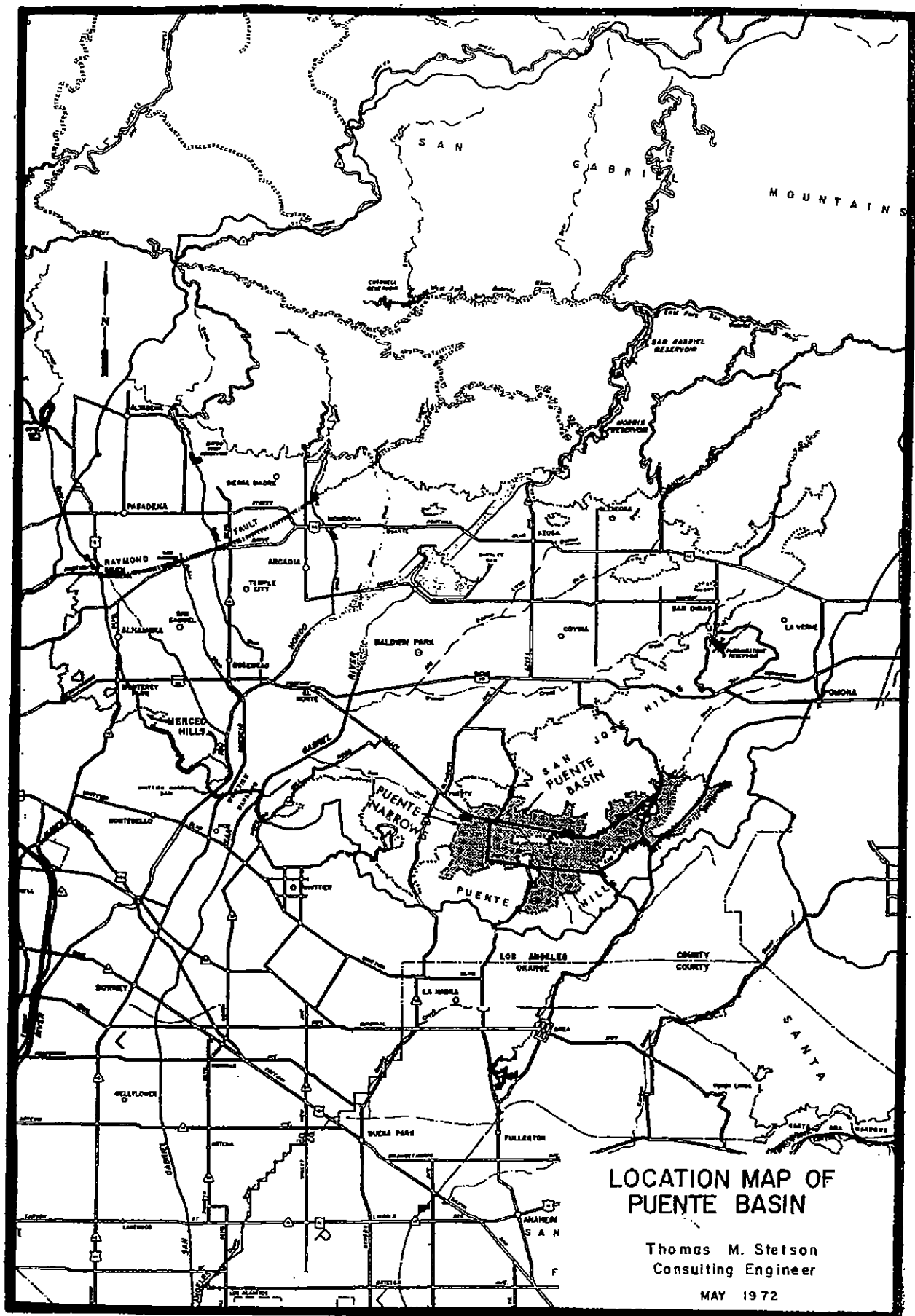
Leice A. Smith
Attorneys for Rowland District

ROWLAND AREA COUNTY WATER
DISTRICT

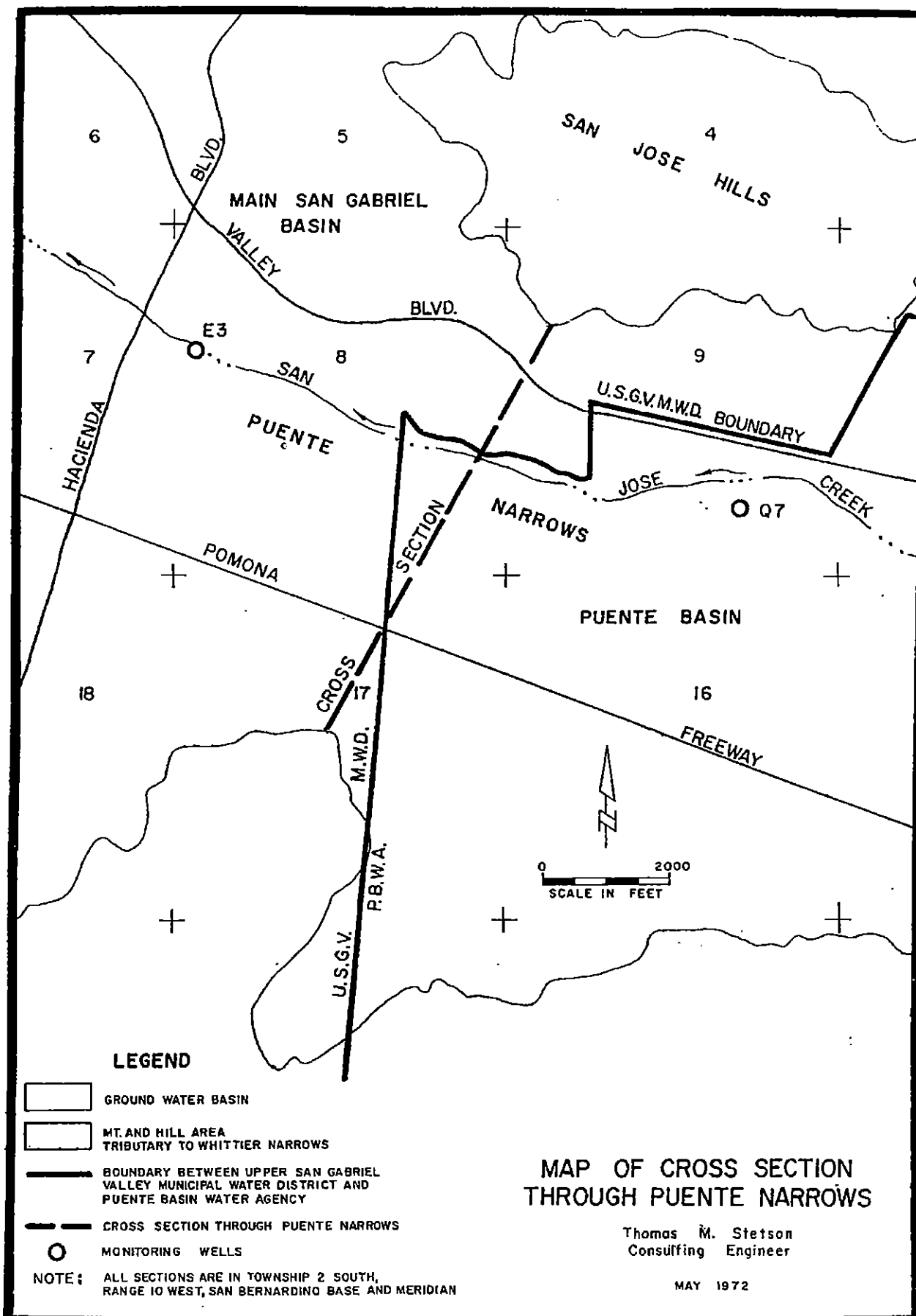
By

Wm. A. Simmons
President
Wm. A. Simmons

Exhibit "J"



APPENDIX "A"
EXHIBIT "J"



ENGINEERING CRITERIA

APPENDIX "C"

1. Monitoring Wells. The wells designated as State Wells No. 2S/10W-9Q7 and 2S/10W-8E3 and Los Angeles County Flood Control District Nos. 3079M and 3048B, respectively, shall be used to measure applicable ground water elevations. In the event either monitoring well should fail or become unrepresentative, a substitute well shall be selected or drilled by Watermaster. The cost of drilling a replacement well shall be the obligation of the Puente Agency.

2. Measurement. Each monitoring well shall be measured and the ground water elevation determined semi-annually on or about April 1 and October 1 of each year. Prior to each measurement, the pump shall be turned off for a sufficient period to insure that the water table has recovered to a static or near equilibrium condition.

3. Hydraulic Gradient. The hydraulic gradient, or slope of the water surface through Puente Narrows, shall be calculated between the monitoring wells as the difference in water surface elevation divided by the distance, approximately 9,000 feet, between the wells. The hydraulic gradient shall be determined for the spring and fall and the average hydraulic gradient calculated for the year.

4. Ground Water Elevation at Puente Narrows Cross Section. The ground water elevation at the Puente Narrows

APPENDIX "C"

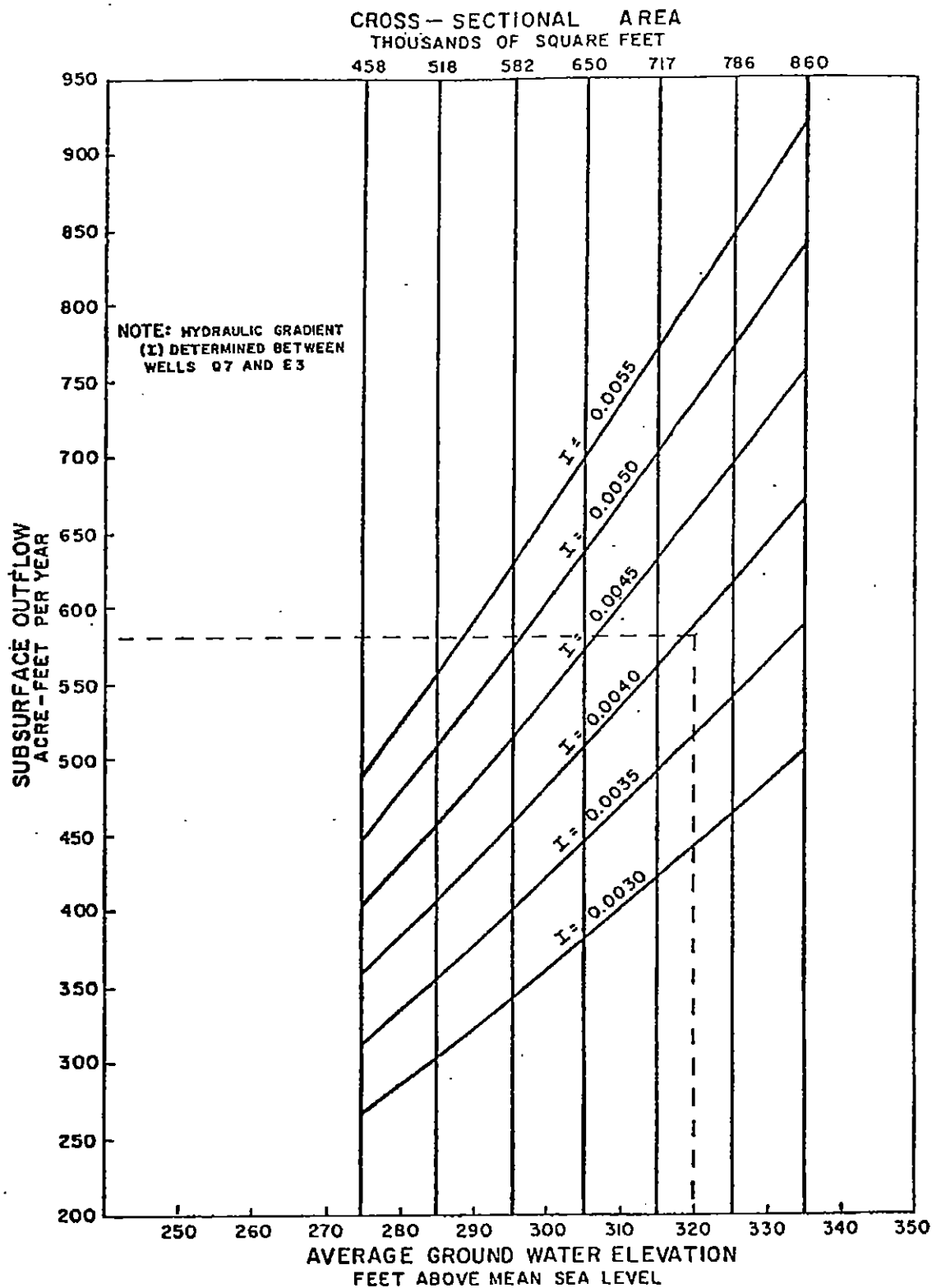
Exhibit "J"

cross section midway between the monitoring wells shall be the average of the ground water elevation at the two wells. This shall be determined for the spring and fall and the average annual ground water elevation calculated for the year.

5. Determination of Underflow. The chart attached is a photo-reduction of a full scale chart on file with the Watermaster. By applying the appropriate average annual hydraulic gradient (I) to the average annual ground water elevation at the Puente Narrows cross section (involving the appropriate cross-sectional area [A]), it is possible to read on the vertical scale the annual acre feet of underflow.

APPENDIX "C"

Exhibit "J"



RELATIONSHIP OF AVERAGE GROUND WATER ELEVATION AT PUENTE NARROWS
AND APPLICABLE CROSS-SECTIONAL AREA WITH SUBSURFACE OUTFLOW
THROUGH PUENTE NARROWS FOR VARIOUS HYDRAULIC GRADIENTS

Thomas M. Stelson
Consulting Engineer

MAY 1972

EXHIBIT "K"

OVERLYING RIGHTS

I. NATURE OF OVERLYING RIGHT

An "Overlying Right" is the right to Produce water from the Main San Gabriel Basin for use on the overlying lands hereinafter described. Such rights are exercisable without quantitative limit only on said overlying land and cannot be separately conveyed or transferred apart therefrom. The exerciser of such right is assessable by Watermaster as provided in Paragraph 21 of the Amended Judgment herein (prior Paragraph 14.5 of the Judgment herein) and is subject to the other provisions of said Paragraph.

II. OVERLYING LANDS (Description)

The overlying lands to which Overlying Rights are appurtenant are described as follows:

"Those portions of Lots 1 and 2 of the lands formerly owned by W.A. Church, in the Rancho San Francisquito, in the City of Irwindale, County of Los Angeles, State of California, as shown on recorder's filed map No. 509, in the office of the County Recorder of said County, lying northeasterly of the northeasterly line and its southeasterly prolongation of Tract 1888, as shown on map recorded in Book 21 page 183 of Maps, in the office of the County Recorder of said County.

"EXCEPT the portions thereof lying northerly and northwesterly of the center line of Arrow Highway described 'Sixth' and the center line of Live Oak Avenue described 'Third' in a final decree of condemnation, a certified copy of which was recorded August 18, 1933 as Instrument No. 354, in Book 12289, Page 277, Official Records.

"ALSO EXCEPT that portion of said land described in the final decree of condemnation entered in Los Angeles County Superior Court Case No. 805008, a certified copy of which was recorded September 21, 1964, as Instrument No. 3730, in Book D-2634, Page 648, Official Records."

III. PRODUCERS ENTITLED TO EXERCISE OVERLYING RIGHTS AND
THEIR RESPECTIVE CONSUMPTIVE USE PORTIONS

The persons entitled to exercise Overlying Rights are both the owners of Overlying Rights and persons and entities licensed by such owners to exercise such Overlying Rights. The persons entitled to exercise Overlying Rights and their respective Consumptive Use portions are as follows:

OWNER PRODUCERS

CONSUMPTIVE USE PORTION

BROOKS GIFFORD, SR.
BROOKS GIFFORD, JR.
PAUL MNOIAN
JOHN MGRDICHIAN
J. EARL GARRETT

3.5 acre-feet per year

Present User:
Nu-Way Industries

PRODUCERS UNDER LICENSE

A. WILLIAM C. THOMAS
and EVELYN F. THOMAS,
husband and wife, and
MALCOLM K. GATHERER
and JACQUELINE GATHERER,
husband and wife,
doing business by
and through B & B
REDI-I-MIX CONCRETE,
INC., a corporation

45.6 acre-feet per year

B. PRE-STRESS CRANE RIGGING &
TRUCK CO., INC.,
a corporation

1.0 acre-foot per year

Present Users:
Pre-Stress Crane Rigging &
Truck Co., Inc., a corporation

Total 50.1 acre-feet per year

IV. ANNUAL GROSS AMOUNT OF
PRODUCTION FROM WHICH
CONSUMPTIVE USE PORTIONS
WERE DERIVED

183.65 acre-feet

Exhibit "L"

LIST OF PRODUCERS AND THEIR DESIGNEES
June, 1989

<u>Producer Name</u>	<u>Designee</u>
<u>A</u>	
Adams Ranch Mutual Water Company	Goji Iwakiri
Alhambra, City of	T. E. Shollenberger
Amarillo Mutual Water Company	Ester Guadagnolo
Anderson, Ray	Ray Anderson
Andrade, Macario, et al.	Macario R. Andrade
Arcadia, City of	Eldon Davidson
AZ-Two, Inc.	R. S. Chamberlain
Azusa, City of	William H. Redcay
Azusa Ag. Water Company	Robert E. Talley
Azusa Valley Water Company	Edward Heck
<u>B</u>	
Baldwin Park County Water District (See Valley County Water District)	-
Banks, Gale C.	Gale C. Banks
Base Line Water Company	Everett W. Hughes, Jr.
Beverly Acres Mutual Water User's Assn. (Formerly Beverly Acres Mutual Water Co.)	Eloise A. Moore
Burbank Development Company	Darrell A. Wright
<u>C</u>	
Cadway, Inc.	P. Geoffrey Nunn
California-American Water Company (San Marino System)	Andrew A. Krueger
California-American Water Company (Duarte System)	Andrew A. Krueger
California Country Club	Henri F. Pellissier
California Domestic Water Company	P. Geoffrey Nunn
Cedar Avenue Mutual Water Company	Austin L. Knapp

Exhibit "L"

<u>Producer Name</u>	<u>Designee</u>
Champion Mutual Water Company	Margaret Bauwens
Chevron, USA, Inc.	Ms. Margo Bart
Clayton Manufacturing Company	Don Jones
Conrock Company	Gene R. Block
Corcoran Brothers	Ray Corcoran
County Sanitation District No. 18	Charles W. Curry
Covell, et al.	Darr Jobe
Covell, Ralph	Ralph Covell
Covina, City of	Wayne B. Dowdey
Covina Irrigating Company	William R. Temple
Crevolin, A. J.	A. J. Crevolin
Crown City Plating Company	N. G. Gardner
<u>D</u>	
Davidson Optronics, Inc.	James McBride
Dawes, Mary Kay	Mary Kay Dawes
Del Rio Mutual Water Company	Gonzalo Galindo
Driftwood Dairy	James E. Dolan
Dunning, George	George Dunning
<u>E</u>	
East Pasadena Water Company	Robert D. Mraz
El Monte, City of	Robert J. Pinniger
El Monte Cemetery Association	Linn E. Magoffin
<u>F</u>	
Faix, Ltd.	Henri F. Pellissier
<u>G</u>	
Glendora, City of	Arthur E. Cook
Green, Walter	Dr. Walter Green
<u>H</u>	
Hansen, Alice	Alice Hansen

Exhibit "L"

<u>Producer Name</u>	<u>Designee</u>
Hartley, David	David Hartley
Hemlock Mutual Water Company	Bud Selander
Hunter, Lloyd F.	Lloyd F. Hunter
<u>I</u> Industry Waterworks System, City of	Mary L. Jaureguy
<u>K</u> Kiyan Farm Kiyan, Hideo	Mrs. Hideo Kiyan
Kirklen Family Trust	Dawn Kirklen
Knight, Kathryn M.	William J. Knight
<u>L</u> Landeros, John	John Landeros
La Puente Valley County Water District	Mary L. Jaureguy
La Verne, City of	N. Kathleen Hamm
Livingston-Graham	Gary O. Tompkins
Los Angeles, County of	Robert L. Larson
Loucks, David	David Loucks
<u>M</u> Maddock, A. G.	Ranney Draper, Esq.
Maechtlen, Trust of J. J.	Jack F. Maechtlen
Maple Water Company, Inc.	Charles King
Martinez, Francis Mercy	Francis Mercy Martinez
Metropolitan Water District of Southern California	Fred Vendig, Esq.
Miller Brewing Company	Dennis B. Puffer
Mnoian, Paul, et al.	Mal Gatherer
Monrovia, City of	Robert K. Sandwick
Monrovia Nursery	Miles R. Rosedale
Monterey Park, City of	Nels Palm

Exhibit "L"

<u>Producer Name</u>	<u>Designee</u>
<u>N</u> Nick Tomovich & Sons	Nick Tomovich
<u>O</u> Owl Rock Products Company	Peter L. Chiu
<u>P</u> Phillips, Alice B., et al. Pico County Water District Polopolus, et al.	Jack F. Maechtlen Robert P. Fuller Christine Chronis
<u>R</u> Rados Brothers Richwood Mutual Water Company Rincon Ditch Company Rincon Irrigation Company Rose Hills Memorial Park Association Rosemead Development, Ltd. Rurban Homes Mutual Water Company Ruth, Roy	Alexander S. Rados Bonnie Pool K. E. Nungesser K. E. Nungesser Allan D. Smith John W. Lloyd George W. Bucey Roy Ruth
<u>S</u> San Dimas - La Verne Recreational Facilities Authority San Gabriel Country Club San Gabriel County Water District San Gabriel Valley Municipal Water District San Gabriel Valley Water Company Sloan Ranches Sonoco Products Company South Covina Water Service Southern California Edison Company	R. F. Griszka Fran Wolfe Philip G. Crocker Bob Stallings Robert H. Nicholson, Jr. Larry R. Sloan Elaine Corboy Anton C. Garnier S. R. Shermoen

Exhibit "L"

<u>Producer Name</u>	<u>Designee</u>
Southern California Water Company -San Dimas District	J. F. Young
Southern California Water Company -San Gabriel Valley District	J. F. Young
South Pasadena, City of	John Bernardi
Southwestern Portland Cement Company	Dale W. Heineck
Standard Oil Company of California	John A. Wild
Sterling Mutual Water Company	Bennie L. Prowett
Suburban Water Systems	Anton C. Garnier
Sully-Miller Contracting Company	R. R. Munro
Sunny Slope Water Company	Michael J. Hart
<u>T</u> Taylor Herb Garden	Paul S. Taylor
Texaco, Inc.	E. O. Wakefield
Tyler Nursery	James K. Mitsumori, Esq.
<u>U</u> United Concrete Pipe Corporation	Doyle H. Wadley
United Rock Products Corporation	William S. Capps, Esq.
<u>V</u> Valencia Heights Water Company	Herman Weskamp
Valley County Water District (Formerly Baldwin Park County Water District)	Stanley D. Yarbrough
Valley View Mutual Water Company	Robert T. Navarre
Via, H., Trust of	Marverna Parton
<u>W</u> Ward Duck Company	Richard J. Woodland
W. E. Hall Company	Thomas S. Bunn, Jr., Esq.
White, June G., Trustee	June G. Lovelady
Whittier, City of	Neil Hudson
Wilmott, Erma M.	Erma M. Wilmott

Exhibit "M"

WATERMASTER MEMBERS

FOR CALENDAR YEAR 1973

ROBERT T. BALCH (Producer Member), Chairman
LINN E. MAGOFFIN (Producer Member), Vice Chairman
RICHARD L. ROWLAND (Producer Member), Secretary
BOYD KERN (Public Member), Treasurer
WALKER HANNON (Producer Member)
HOWARD H. HAWKINS (Public Member)
M. E. MOSLEY (Producer Member)
CONRAD T. REIBOLD (Public Member)
HARRY C. WILLS (Producer Member)

STAFF

Carl Fossette, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1974

ROBERT T. BALCH (Producer Member), Chairman
LINN E. MAGOFFIN (Producer Member), Vice Chairman
RICHARD L. ROWLAND (Producer Member), Secretary
BOYD KERN (Public Member), Treasurer
WALKER HANNON (Producer Member)
BURTON E. JONES (Public Member)
M. E. MOSLEY (Producer Member)
CONRAD T. REIBOLD (Public Member)
HARRY C. WILLS (Producer Member)

STAFF

Carl Fossette, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1975

ROBERT T. BALCH (Producer Member), Chairman
LINN E. MAGOFFIN (Producer Member), Vice Chairman
HARRY C. WILLS (Producer Member), Secretary
BOYD KERN (Public Member), Treasurer
WALKER HANNON (Producer Member)
BURTON E. JONES (Public Member)
D. J. LAUGHLIN (Producer Member)
M. E. MOSLEY (Producer Member)
CONRAD T. REIBOLD (Public Member)

STAFF

Carl Fossette, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1976

ROBERT T. BALCH (Producer Member), Chairman
LINN E. MAGOFFIN (Producer Member), Vice Chairman
HARRY C. WILLS (Producer Member), Secretary
BOYD KERN (Public Member), Treasurer
WALKER HANNON (Producer Member)
BURTON E. JONES (Public Member)
D. J. LAUGHLIN (Producer Member)
M. E. MOSLEY (Producer Member)
CONRAD T. REIBOLD (Public Member)

STAFF

Jane M. Bray, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1977

ROBERT T. BALCH (Producer Member), Chairman
LINN E. MAGOFFIN (Producer Member), Vice Chairman
HARRY C. WILLS (Producer Member), Secretary
CONRAD T. REIBOLD (Public Member), Treasurer
WALKER HANNON (Producer Member)
BURTON E. JONES (Public Member)
BOYD KERN (Public Member)
D. J. LAUGHLIN (Producer Member)
R. H. NICHOLSON, JR. (Producer Member)

STAFF

Jane M. Bray, Assistant Secretary-Assistant Treasurer)
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1978

ROBERT T. BALCH (Producer Member), Chairman
LINN E. MAGOFFIN (Producer Member), Vice Chairman
D. J. LAUGHLIN (Producer Member), Secretary
CONRAD T. REIBOLD (Public Member), Treasurer
WALKER HANNON (Producer Member)
BURTON E. JONES (Public Member)
L. E. MOELLER (Producer Member)
R. H. NICHOLSON, JR. (Producer Member)
WILLIAM M. WHITESIDE (Public Member)

STAFF

Jane M. Bray, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1979

LINN E. MAGOFFIN (Producer Member), Chairman
D. J. LAUGHLIN (Producer Member), Vice Chairman
R. H. NICHOLSON, JR. (Producer Member), Secretary
CONRAD T. REIBOLD (Public Member), Treasurer
WALKER HANNON (Producer Member)
BURTON E. JONES (Public Member)
L. E. MOELLER (Producer Member)
WILLIAM M. WHITESIDE (Public Member)

STAFF

Jane M. Bray, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1980

LINN E. MAGOFFIN (Producer Member), Chairman
R. H. NICHOLSON, JR. (Producer Member), Vice Chairman
WILLIAM M. WHITESIDE (Public Member), Secretary
CONRAD T. REIBOLD (Public Member), Treasurer
ROBERT T. BALCH (Producer Member)
ROBERT G. BERLIEN (Producer Member)
ANTON C. GARNIER (Producer Member)
TRAVIS L. MANNING (Public Member)
L. E. MOELLER (Producer Member)

STAFF

Jane M. Bray, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1981

LINN E. MAGOFFIN (Producer Member), Chairman
R. H. NICHOLSON, JR. (Producer Member), Vice Chairman
WILLIAM M. WHITESIDE (Public Member), Secretary
CONRAD T. REIBOLD (Public Member), Treasurer
ROBERT T. BALCH (Producer Member)
ROBERT G. BERLIEN (Producer Member)
ANTON C. GARNIER (Producer Member)
TRAVIS L. MANNING (Public Member)
L. E. MOELLER (Producer Member)

STAFF

Jane M. Bray, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1982

LINN E. MAGOFFIN (Producer Member), Chairman
R. H. NICHOLSON, JR. (Producer Member), Vice Chairman
WILLIAM M. WHITESIDE (Public Member), Secretary
CONRAD T. REIBOLD (Public Member), Treasurer
ROBERT T. BALCH (Producer Member)
ROBERT G. BERLIEN (Producer Member)
ANTON C. GARNIER (Producer Member)
L. E. MOELLER (Producer Member)
ALFRED F. WITTIG (Public Member)

STAFF

Jane M. Bray, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1983

LINN E, MAGOFFIN (Producer Member), Chairman
R. H. NICHOLSON, JR. (Producer Member), Vice Chairman
ROBERT G. BERLIEN (Producer Member), Secretary
CONRAD T. REIBOLD (Public Member), Treasurer
ROBERT T. BALCH (Producer Member)
DONALD F. CLARK (Public Member)
ANTON C. GARNIER (Producer Member)
L. E. MOELLER (Producer Member)
ALFRED R. WITTIG (Public Member)

STAFF

Jane M. Bray, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1984

LINN E. MAGOFFIN (Producer Member), Chairman
R. H. NICHOLSON, JR. (Producer Member), Vice Chairman
ROBERT G. BERLIEN (Producer Member), Secretary
CONRAD T. REIBOLD (Public Member), Treasurer
ROBERT T. BALCH (Producer Member)
DONALD F. CLARK (Public Member)
ANTON C. GARNIER (Producer Member)
L. E. MOELLER (Producer Member)
ALFRED R. WITTIG (Public Member)

STAFF

Jane M. Bray, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1985

LINN E. MAGOFFIN (Producer Member), Chairman
R. H. NICHOLSON, JR. (Producer Member), Vice Chairman
ROBERT G. BERLIEN (Producer Member), Secretary
CONRAD T. REIBOLD (Public Member), Treasurer
ROBERT T. BALCH (Producer Member)
DONALD F. CLARK (Public Member)
ANTON C. GARNIER (Producer Member)
L. E. MOELLER (Producer Member)
ALFRED R. WITTIG (Public Member)

STAFF

Jane M. Bray, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1986

LINN E. MAGOFFIN (Producer Member), Chairman
R. H. NICHOLSON, JR. (Producer Member), Vice Chairman
ROBERT G. BERLIEN (Producer Member), Secretary
CONRAD T. REIBOLD (Public Member), Treasurer
ROBERT T. BALCH (Producer Member)
DONALD F. CLARK (Public Member)
L. E. MOELLER (Producer Member)
REGINOLD A. STONE (Producer Member)
ALFRED R. WITTIG (Public Member)

STAFF

Jane M. Bray, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1987

LINN E. MAGOFFIN (Producer Member), Chairman
REGINALD A. STONE (Producer Member), Vice Chairman
L. E. MOELLER (Producer Member), Secretary
ALFRED R. WITTIG (Public Member), Treasurer
ROBERT T. BALCH (Producer Member)
GERALD J. BLACK (Producer Member)
DONALD F. CLARK (Public Member)
EDWARD R. HECK (Producer Member)
JOHN E. MAULDING (Public Member)

STAFF

Robert G. Berlien, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1988

LINN E. MAGOFFIN (Producer Member), Chairman
REGINALD A. STONE (Producer Member), Vice Chairman
L. E. MOELLER (Producer Member), Secretary
ALFRED R. WITTIG (Public Member), Treasurer
ROBERT T. BALCH (Producer Member)
GERALD J. BLACK (Producer Member)
DONALD F. CLARK (Public Member)
EDWARD R. HECK (Producer Member)
JOHN E. MAULDING (Public Member)

STAFF

Robert G. Berlien, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1989

LINN E. MAGOFFIN (Producer Member), Chairman
REGINALD A. STONE (Producer Member), Vice Chairman
GERALD G. BLACK (Producer Member), Secretary
ALFRED R. WITTIG (Public Member), Treasurer
ROBERT T. BALCH (Producer Member) *
DONALD F. CLARK (Public Member)
EDWARD R. HECK (Producer Member)
BURTON E. JONES (Public Member)
NELS PALM (Producer Member) **
THOMAS E. SCHOLLENBERGER (Producer Member)

STAFF

Robert G. Berlien, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

* DECEASED APRIL 25, 1989

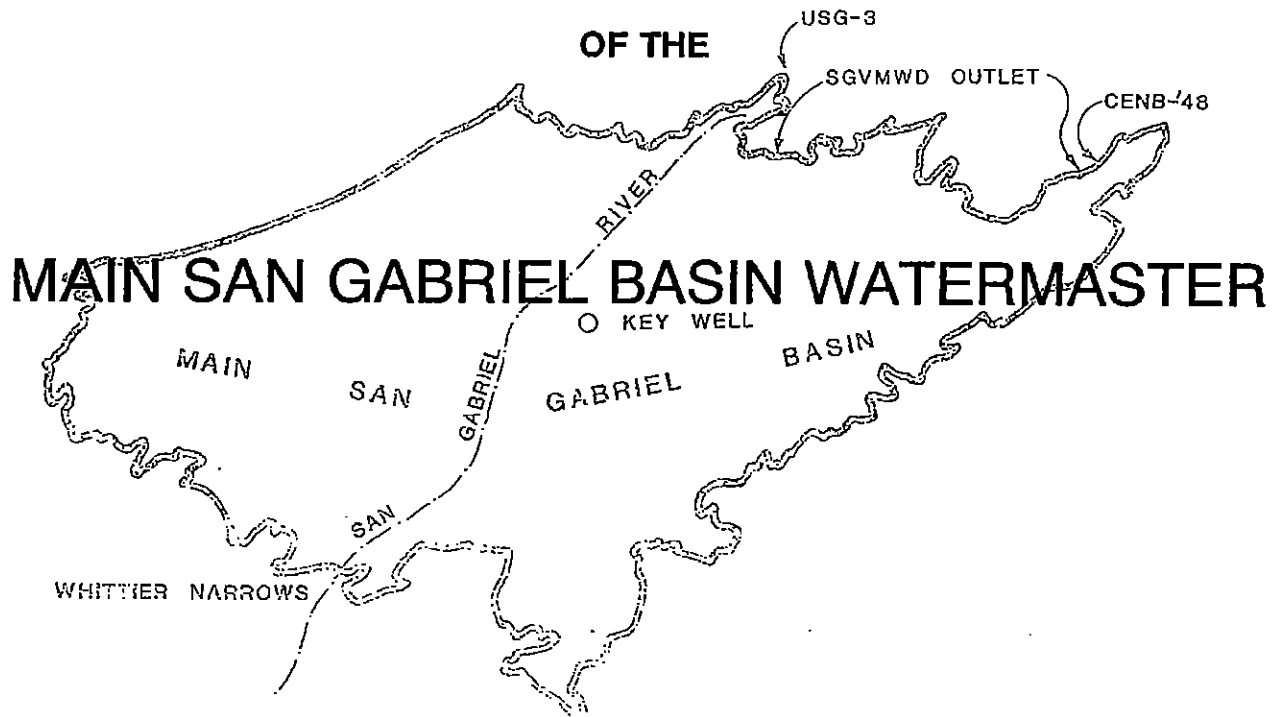
** Appointed August 24, 1989, for the balance of the calendar year term, to replace deceased member, Robert T. Balch.

APPENDIX E
Rules and Regulations of the
Main San Gabriel Basin Watermaster

WATERMASTERS:
Linn E. Magoffin, Chairman
Reginald A. Stone, Vice Chairman
Gerald J. Black, Secretary
Nels Palm, Treasurer
Royall K. Brown
Richard W. Cartwell
Burton E. Jones
C. Robert Keiser
A. A. Krueger

John E. Maulding, Executive Officer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

RULES AND REGULATIONS



UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT VS. CITY OF ALHAMBRA, ET AL
CASE NO. 924128 - LOS ANGELES COUNTY

AS AMENDED
OCTOBER 7, 1992
RESOLUTION NO. 10-92-99

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE NO.</u>
1.	Offices and Records	1
2.	Watermaster Meetings and Holidays	1
	(a) Holidays	1
	(b) Meeting Changes	3
	(c) Special Meetings	3
	(d) Adjournment	3
3.	Quorum of Watermaster, Necessary Votes for Action and Roll Call of Votes	3
4.	Agenda for Watermaster Meetings	4
5.	Conduct of Meetings -- Roberts' Rules of Order	4
6.	Organization of Watermaster	4
7.	Minutes	4
8.	Designee to Receive Future Notices	4
	(a) Substitute Designee	5
	(b) Service upon Designee	5
	(c) List of Designees	5
9.	Election of Producer Representatives	5
	(a) Notice of Nomination Election	5
	(b) Voting	5
	(c) Conduct of Elections	6
10.	Vacancy on Watermaster and Replacement	6
11.	Watermaster Action Subject to Court Review	7
	(a) Effective Date of Watermaster Action	7
	(b) Notice of Motion	7
	(c) Time for Motion	7
	(d) <i>De Novo</i> Nature of Proceedings	8
	(e) Decision	8
12.	Water Measuring Devices and Meter Test Program	8
	(a) Test of Meters Which Supply Watermaster	8
	(b) Wells	8
	(c) Calibrated Test Equipment	9

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE NO.</u>
	(d) Repair or Replacement of Inaccurate Meters	9
	(e) Surface Diversions	9
	(f) Interim Meter Tests	9
	(g) Watermaster Approved Meter Testers	10
	(h) Meter Seal by Watermaster and Notification of Meter Maintenance	10
	(i) Estimation of Production Due to Meter Maintenance	10
13.	Reports of Producers to Watermaster	11
	(a) Adjudicated Right in Excess of Five (5) Acre-Feet Not to be Reduced to Minimal Producer by Transfer	11
	(b) Notice to Watermaster of Transfers of Water Rights	11
	(c) Conveyance of Water Right with Conveyance of Property	12
	(d) Conveyance of Water Right without Conveyance of Property	12
	(e) Transfer of Overlying Right	13
	(f) Intervention Stipulation Required	13
	(g) Notice Required	13
	(h) Approved Forms of Transfer Documents and Other Forms . .	14
	(i) Presumption as to Unexercised Rights	14
14.	Operating Safe Yield	15
	(a) Preliminary Determination	15
	(b) Notice of Hearing	15
	(c) Watermaster Final Determination and Review Thereof	16
15.	Carry-over Rights	16
	(a) Pumping	16
	(b) Diversions	16
	(c) Overlying Rights	16
	(d) Presumption as to Carry-over Rights	16
16.	Special Hearings	17
17.	Policy Decisions	17
18.	Assessments	17
	(a) Administration Costs	17

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE NO.</u>
	(b) Replacement Water Costs	17
	(c) Make-up Obligation	17
	(d) In-Lieu Water Costs	18
	(e) Waivers Possible for Water Quality Improvement or Protection	18
	(f) Application for Waiver of Assessment	19
	(g) Public Hearing and Effective Date	20
19.	Levy and Notice of Assessments	20
	(a) Payment	20
	(b) Delinquency	21
	(c) Adjustments	21
20.	Responsibility for Watermaster Assessments	21
21.	Over and/or Under Reporting	22
	(a) Over Reporting	22
	(b) Under Reporting	23
	(c) Delinquent Assessments--Interest--Costs--Attorney's Fees ...	24
22.	Information Concerning Offers to Purchase, Sell or Lease Water Rights	24
23.	Watermaster Control of Spreading and Ground Water Storage	25
24.	Watermaster Annual Report	25
25.	Watermaster Stipulation Re Intervention After Judgment	25
26.	Uniform Rules and Conditions of Cyclic Storage Agreements	25
	(a) Application for Cyclic Storage Agreements	25
	(b) Purpose of Cyclic Storage Agreements	26
	(c) Available Storage Capacity	26
	(d) Provisions of Cyclic Storage Agreements	26
	(e) Terms of Cyclic Storage Agreements and Extensions	29
	(f) Maximum Storage	29
	(g) Watermaster to be Held Harmless	29
	(h) Reports to Watermaster	30
	(i) Court Approval of Cyclic Storage Agreements	30

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE NO.</u>
27.	Responsible Agency from Whom Watermaster Shall Purchase	
	Replacement Water	30
(a)	Responsible Agencies	30
(b)	Water Used Within the Basin	30
(c)	Water Exported from the Basin	31
(d)	Computations of the Amount of Replacement Water to be Purchased from Responsible Agencies	31
(e)	Net Interagency Transfer Adjustment and Replacement Water Requirement	31
(f)	Special Provisions	33
(g)	Special Provisions Re Alhambra Exchange	33
(h)	Adjustments to Calculated Replacement Water Requirements	33
(i)	Advanced Delivery Account	34
28.	Ground Water Quality Management	35
(a)	Watermaster Approvals	35
(b)	Watermaster Directed Change in Water Production	36
(c)	Producer Data, Initial Submittal	37
(d)	Quarterly Reports	37
(e)	Operating Principles	38
(f)	Emergency Exemptions	38
(g)	Water Quality and Supply Plans	38
(h)	Ground Water Treatment Facilities	40
(i)	Decision Making Process, Hearings and Appeals	41
<u>APPENDICES</u>	<u>TITLE</u>	<u>PAGE NO.</u>
Appendix "A"	Definitions	43
Appendix "B"	Summary of Critical Dates and Actions for Watermaster	49
<u>EXHIBITS</u>	<u>TITLE</u>	<u>PAGE NO.</u>
Exhibit "A"	Permanent Transfer of Water Rights--Prescriptive Pumping Right	A-1
Exhibit "B"	Permanent Transfer of Water Rights--Base Annual Diversion Right	B-1
Exhibit "C"	Permanent Transfer of Water Rights--Integrated Production Right	C-1
Exhibit "D"	Temporary Assignment or Lease of Water Right	D-1
Exhibit "E"	Stipulation Re Intervention After Judgment	E-1

TABLE OF CONTENTS

<u>EXHIBITS</u>	<u>TITLE</u>	<u>PAGE NO.</u>
Exhibit "F"	Designee to Receive Future Notices for and on Behalf of Defendant(s)	F-1
Exhibit "G"	Notice of Transfer of Overlying Rights With Property to Which They are Appurtenant	G-1
Exhibit "H"	Application To Drill Water Well	H-1
Exhibit "I"	Application to Modify Existing Water Well	I-1
Exhibit "J"	Application to Destroy Water Well	J-1
Exhibit "K"	Application For Water Treatment Facility	K-1

1
2 RULES AND REGULATIONS OF
3 MAIN SAN GABRIEL BASIN WATERMASTER

4 (As Revised, Amended, and Readopted by Resolution No. -92- , Adopted
5 , 1992)
6

7
8 The definitions set forth in the Judgment in Los Angeles County Superior Court
9 Civil Action No. 924128, entitled, "Upper San Gabriel Valley Municipal Water District
10 v. City Alhambra, et al," as amended (Judgment herein), as well as additional definitions
11 relating specifically to Section 28 of these Rules and Regulations, are used herein with
12 the same meanings and are listed in Appendix "A" hereof.
13

14 1. Offices and Records. Watermaster's offices and records shall be
15 maintained at:

16 425 East Huntington Drive, Suite 200

17 Monrovia, California 91016,

18 Telephone (818) 305-1500

19 Telefax (818) 305-1506
20

21 Said records shall be available for inspection by any Party during regular
22 business hours. Copies of said records may be had upon payment of the costs of the
23 duplication thereof and of any preparation costs pertaining thereto.

24 2. Watermaster Meetings and Holidays. Regular meetings of Watermaster
25 shall be held at 1:30 P.M. on the first Wednesday of each and every month in the Council
26 Chambers of the City of Monrovia, 415 South Ivy Avenue, Monrovia, California 91016.

27 (a) Holidays. The following holidays shall be observed by
28

Watermaster:

- January 1 (New Year's Day);
- The third Monday in January (Martin Luther King's Birthday);
- The third Monday in February (Presidents' Day);
- The last Monday in May (Memorial Day);
- July 4 (Independence Day);
- The first Monday in September (Labor Day);
- The second Monday in October (Columbus Day);
- November 11 (Veterans' Day);
- The fourth Thursday and the following Friday in November
Thanksgiving);
- December 25 (Christmas Day);
- Each employee's individual birthday, to be taken as a holiday
during the month of such birthday as approved by the Executive
Officer; and one floating holiday each year, to be designated by
the Executive Officer.

(1) If January 1, July 4, November 11, or December 25, fall on a Sunday, the Monday following shall be that holiday and if any of said dates fall on a Saturday, the preceding Friday shall be that holiday.

(2) When any regular meeting of Watermaster shall fall on a hereinabove designated Watermaster holiday (excepting employees' birthdays and said floating holiday), said regular meeting shall be held on the next succeeding regular business day

1 at the same time and at the same place as the said regularly
2 scheduled meeting.

3 (b) Meeting Changes. Any changes in the time or place of said regular
4 meeting shall be in compliance with the Judgment.

5 (c) Special Meetings. Special meetings of Watermaster may be called
6 at any time by the Chairman or Vice-Chairman or by any three (3) members of
7 Watermaster, by written notice in compliance with the Judgment. The calling
8 notice shall specify the time and place of the special meeting and the business to
9 be transacted. No other business shall be considered at such meetings.

10 (d) Adjournment. Any meeting of Watermaster may be adjourned to
11 a time and place specified in the Order of Adjournment. Less than a quorum of
12 Watermaster, or Watermaster's Secretary or Executive Officer, may so adjourn
13 from time to time. A copy of the Order or Notice of Adjournment shall be
14 conspicuously posted on or near the door of the place where the meeting was held
15 or to be held, within twenty-four (24) hours after the adoption of the Order of
16 Adjournment.

17 3. Quorum of Watermaster, Necessary Votes for Action and Roll Call of
18 Votes. Five (5) members of Watermaster shall constitute a quorum for the transaction of
19 its affairs. Action by the affirmative vote of five (5) members shall constitute action by
20 the Watermaster, except that the affirmative vote of six (6) members shall be required:
21 (a) to enter into any Cyclic Storage Agreement; or (b) to approve the purchase, spreading
22 or injection of Supplemental Water for Ground Water recharge.

23 Any member of Watermaster may request a roll call vote on any question
24 or motion considered and the ayes and noes thereon shall be recorded in the minutes of
25

1 the meeting.

2 4. Agenda of Watermaster Meetings. Any person requesting that a matter be
3 considered by Watermaster for action thereon, shall request the same in writing directed
4 to Watermaster's Executive Officer for inclusion on the Agenda of the next scheduled
5 meeting to be held at least ten (10) days after receipt of said request.
6

7 5. Conduct of Meetings -- Roberts' Rules of Order. For the conduct of
8 Watermaster meetings, Roberts' Rules of Order shall be followed and, without consent
9 of Watermaster, the priorities of Watermaster business shall be that stated in the Agenda
10 for a particular meeting.

11 6. Organization of Watermaster. At its first meeting each year, Watermaster
12 shall elect a Chairman and Vice Chairman from its membership. It shall also select a
13 Secretary and a Treasurer and may select such assistants as may be appropriate, any of
14 whom may, but need not be, members of Watermaster.
15

16 7. Minutes. Minutes of all Watermaster meetings shall be kept, which shall
17 reflect all actions taken. Draft copies thereof shall be furnished to any Party who files
18 a request therefor in writing with Watermaster. Said draft copies of minutes shall
19 constitute notice of any Watermaster action therein reported and failure of a Party herein
20 to request copies thereof shall constitute his waiver of notice.
21

22 8. Designee to Receive Future Notices. Each Party who has not heretofore
23 made a designation of the name and address of the person who shall receive service upon
24 and delivery to Parties of various papers shall file with the Court, with proof of service
25 of a copy thereof upon Watermaster, a written designation of the person to whom and the
26 address at which all future notices, determinations, requests, demands, objections, reports
27 and other papers and processes to be served upon that Party or delivered to the Party are
28

1 to be so served or delivered.

2 (a) Substitute Designee. A later substitute designation filed and served in
3 the same manner by any Party shall be effective from the date of filing as to any
4 future notices, determinations, requests, demands, objections, reports and other
5 papers and processes to be served upon or delivered to that Party.
6

7 (b) Service upon Designee. Delivery to or service upon any Party by
8 Watermaster, by any other Party, or by the Court, of any item required to be
9 served upon or delivered to a Party under or pursuant to the Judgment herein may
10 be by deposit in the mail, first class, postage prepaid, addressed to the latest
11 Designee of the Party to be served and at the address of said latest designation
12 filed by that Party.
13

14 (c) List of Designees. Watermaster shall maintain a current list of Party
15 Designees to receive notices under the Judgment.

16 9. Election of Producer Representatives.

17 (a) Notice of Nomination Election. Watermaster shall annually give thirty
18 (30) days notice to all Parties that an election shall be held at Watermaster's
19 regularly scheduled meeting in November of each year, for the purpose of
20 nominating Producer representatives to Watermaster.
21

22 (b) Voting. Nominations of six (6) Producer representatives shall be by
23 cumulative voting in person or by proxy, with each Producer entitled to one (1)
24 vote for each one hundred (100) acre-feet, or portion thereof, owned by him, of
25 Base Annual Diversion Right, Prescriptive Pumping Right or Integrated Production
26 Right, as defined in the Judgment. When the names placed in nomination exceed
27 the number of representatives to be elected, votes shall be cast by ballot using
28

1 official ballot forms provided by Watermaster. Each ballot form must list the
2 Producer and Designee or proxy holder casting the vote, the Producer's voting
3 entitlement, the names of the nominees for whom the votes have been cast, and
4 the number of votes cast for each nominee.

5 (c) Conduct of Elections. Prior to the nomination of Producer
6 representatives, the Chairman shall appoint tellers to conduct the election. Such
7 tellers may include any member of Watermaster staff to monitor the canvassing
8 and counting of votes. The tellers shall distribute the ballots, and, at the
9 conclusion of the balloting, collect the ballots, retire to tabulate the votes, and
10 promptly report the results of the election to the Parties present at the election.
11

12 (1) In the event there is a challenge to the declared election
13 results, the Chairman shall appoint three (3) Producer Parties as
14 election inspectors who shall recount the election ballots and
15 immediately certify the results of such election to Watermaster and
16 others present at the election.
17

18 (2) All ballots shall be considered confidential, and no ballot or
19 information thereon shall be disclosed except to the appointed
20 tellers and election inspectors, without the express permission of
21 the Producer casting the ballot.
22

23 10. Vacancy on Watermaster and Replacement. In the event of a vacancy on
24 Watermaster, a successor shall be nominated at a special meeting of Watermaster and
25 Producers to be called by Watermaster within ninety (90) days in the case of a Producer
26 representative or by the action of the appropriate District Board of Directors in the case
27 of a Public Representative. Subject to approval and appointment by the Court, such
28

1 successor Watermaster shall fill the unexpired term of the Watermaster member replaced.

2 11. Watermaster Action Subject to Court Review. Any action, decision, rule
3 or procedure of Watermaster shall be subject to review by the Court on its own motion
4 or on timely petition or motion for an Order to Show Cause by any Party, as follows:

5 (a) Effective Date of Watermaster Action. Any order, decision or
6 action of Watermaster shall be deemed to have occurred on the date that written
7 notice thereof is mailed. Mailing of draft copies of Watermaster minutes which
8 contain such order, decision, action, or contemplated action, to the Parties
9 requesting the same shall constitute such notice to all Parties, as of the date of
10 such mailing.
11

12 (b) Notice of Motion. Any Party may, by a regularly noticed motion,
13 petition the Court for a review of any Watermaster action or decision. Notice of
14 such motion shall be mailed to Watermaster and to the Designees of all Parties.
15 Unless ordered by the Court, such petition shall not operate to stay the effect of
16 such Watermaster action.
17

18 (c) Time for Motion. Within thirty (30) days of mailing of Notice of
19 Watermaster Determination of Operating Safe Yield together with a statement of
20 each Producer's entitlement thereunder, any affected Party may, by a regularly
21 noticed motion, Petition the Court for an Order to Show Cause for review of said
22 Watermaster findings, determination or entitlement and thereupon the Court shall
23 hear Objections thereto and settle such dispute.
24

25 Notice of motion to review any other Watermaster action or decision shall
26 be served and filed within ninety (90) days after such Watermaster action or
27 decision.
28

1 (d) De Novo Nature of Proceedings. Upon filing of such motion for
2 hearing, the Court shall notify the Parties of the date for taking evidence and
3 argument, and shall review *de novo* the question at issue on the date designated.
4 The Watermaster decision or action shall have no evidentiary weight in such
5 proceedings.
6

7 (e) Decision. The decision of the Court in such proceedings shall be
8 an appealable Supplemental Order in this case. When the same is final, it shall
9 be binding upon the Watermaster and the Parties.

10 12. Water Measuring Devices and Meter Test Program. Parties producing in
11 excess of five (5) acre-feet per year shall, pursuant to these uniform rules, install and
12 maintain in good operating condition, at the cost of each such Party, such necessary water
13 measuring devices or meters as may be appropriate. Any such measuring device is
14 subject to such inspection and testing as Watermaster may, from time to time, deem
15 necessary. Upon testing, the meters shall be sealed by Watermaster and remain so sealed.
16

17 Watermaster will conduct a formal meter-testing program to help the
18 Parties accurately report their Production. Watermaster intends to test every meter under
19 its jurisdiction at least once every two (2) years.
20

21 (a) Tests of Meters Which Supply Watermaster. At least once every
22 two (2) years, Watermaster shall request certified meter tests of all meters of
23 Responsible Agencies through which Supplemental Water is furnished to
24 Watermaster and of the meters which measure all Cyclic Storage deliveries
25 authorized by Watermaster.
26

27 (b) Wells. Water wells shall be equipped with a positive displacement,
28 velocity impeller, venturi or orifice-type meter with a totalizer. The totalizer shall

1 be correctable only by changing mechanical gear equipment. The meter shall be
2 accessible and installed according to good design practices. Watermaster
3 personnel shall assist any Party having any question as to installation requirements.

4 (c) Calibrated Test Equipment. Watermaster or its approved meter
5 tester will maintain a complete line of carefully calibrated test equipment. This
6 equipment is the standard with which all water meters must be compared. The
7 tolerance for each meter is plus (+) or minus (-) five percent (5%) of the standard.
8 Watermaster may require an aggregate accuracy of plus (+) or minus (-) two
9 percent (2%).
10

11 (d) Repair or Replacement of Inaccurate Meters. Defective or
12 inaccurate meters must be repaired within thirty (30) days of receipt of notice
13 thereof from Watermaster.
14

15 (e) Surface Diversions. Surface Water Diversions shall be measured
16 with a weir and recorder or meter capable of accurately measuring and recording
17 such Diversions.

18 (f) Interim Meter Tests. Should a Producer discover that the meter
19 which measures the water Production from his well is measuring inaccurately, he
20 shall first notify Watermaster thereof, have the meter retested and, if measuring
21 inaccurately, then have the same repaired at the earliest practical and reasonable
22 time. Upon the completion of such repair, such Producer shall immediately have
23 such meter tested and sealed by Watermaster and it shall remain so sealed. Such
24 testing and sealing will be accomplished by Watermaster upon request therefor by
25 said Producer or said repaired meter may be tested and sealed by any meter tester
26 authorized by Watermaster, as provided in Subsection (g) of this Section 12.
27
28

1 Results of such meter tests shall be furnished to Watermaster within ten (10) days
2 of testing, on forms provided by Watermaster.

3 (g) Watermaster Approved Meter Testers. Persons, firms or
4 corporations in the business of repairing and/or testing water measuring devices
5 may be approved by Watermaster to test and seal meters on behalf of Watermaster
6 by submitting their qualifications therefor to Watermaster and obtaining
7 Watermaster's approval to perform meter tests and seal such meters as agents of
8 Watermaster. The name, address and telephone number of all such Watermaster
9 approved meter testers shall be maintained at and be available from the office of
10 Watermaster.
11

12 (h) Meter Seal by Watermaster and Notification of Meter Maintenance.
13

14 At the completion of all meter tests Watermaster's seal shall be placed on the
15 meter, if the meter test demonstrates that the meter is within the accuracy standard
16 of five percent (5%).

17 Such sealing then requires that Watermaster be notified in writing
18 within seven (7) days if Watermaster's seal has been broken or if any of the
19 following events occur: (a) the meter is to be repaired or recalibrated; (b) there
20 is any other interference affecting the meter or Watermaster's seal; (c) the meter
21 is to be relocated even if Watermaster's seal is still intact; or (d) a new meter is
22 to be installed.
23

24 (i) Estimation of Production Due to Meter Maintenance. When a
25 Producer must estimate Production due to meter maintenance, he shall consult with
26 Watermaster or its engineer for approval of the method of estimation. A copy of
27 the estimate calculations shall be supplied to Watermaster with the corresponding
28

1 Quarterly Production Report.

2 13. Reports of Producers to Watermaster. Each Producer with an adjudicated
3 right in excess of five (5) acre-feet per year and each Producer with an Overlying Right
4 in any amount shall file with Watermaster a quarterly report of water Produced from the
5 Basin or Relevant Watershed, on forms provided by Watermaster. Quarterly Production
6 Reports shall be so filed no later than the last day of the month next succeeding the end
7 of the relevant quarter, i.e. April 30, July 31, October 31 and January 31.
8

9 (a) Adjudicated Right in Excess of Five (5) Acre-Feet Not to be
10 Reduced to Minimal Producer by Transfer. Any portion of: (1) the Base Annual
11 Diversion Right of a Diverter; (2) the Prescriptive Pumping Right of a Pumper;
12 or (3) the Diversion Component and Prescriptive Pumping Component of an
13 Integrated Producer, adjudicated in any amount in excess of five (5) acre-feet per
14 year [at the time that Judgment herein was entered, January 4, 1973], that is or
15 may be reduced to five (5) acre-feet or less by assignment or transfer of rights, as
16 permitted by Section 55 of the Judgment, shall not enjoy the status of a Minimal
17 Producer as defined in Section 10 (o) of the Judgment.
18

19 (b) Notice to Watermaster of Transfers of Water Rights. Within fifteen
20 (15) days thereof all Parties shall notify Watermaster of any transfer, assignment,
21 license or lease of any water right, or portion thereof, not shown in the Judgment
22 or previously filed with Watermaster and such transferee must be or become a
23 Party to the action (as provided in Section 57 of the Judgment). All Parties are
24 required to notify Watermaster of any subsequent assignment, transfer, license or
25 lease of water rights granted or acquired by them and they shall file a duly
26 acknowledged copy of the document(s) therefor with Watermaster, within fifteen
27
28

1 (15) days after execution and acknowledgement of such document(s).

2 For such assignment, transfer, license or lease of water rights to be
3 effective for, or be deemed by Watermaster to apply to, Production in a particular
4 Fiscal Year (July 1 - June 30), the document(s) therefor shall be executed and
5 acknowledged prior to the end of said Fiscal Year (June 30) and copies thereof
6 showing such acknowledgement must be received by Watermaster prior to July 15,
7 following the end of said particular Fiscal Year. The transferee must be, or
8 petition to become, a Party to the action within ninety (90) days following such
9 assignment, transfer, license or lease of water rights.
10

11 When the term of a temporary assignment, transfer, license or lease of
12 water rights extends beyond the end of the current Fiscal Year, it shall be the
13 obligation of the transferee thereof to annually, during the month of July of each
14 Fiscal Year during said term, notify Watermaster of said transferee's intention to
15 exercise said water right during the then current applicable Fiscal Year.
16

17 (c) Conveyance of Water Right with Conveyance of Property. Parties
18 are advised that when a water right owner conveys the property where a water
19 right was developed, the said water right shall not be conveyed with such property
20 unless and until the appropriate notice procedures established by Watermaster have
21 been complied with. When it is intended to transfer or acquire adjudicated water
22 rights in the Basin or Relevant Watershed, the Parties thereto are advised to use
23 the appropriate forms contained in exhibits to these Rules and Regulations and to
24 notify Watermaster of such transfers by furnishing a copy of such transfer
25 documents(s) within fifteen (15) days of execution and acknowledgement thereof.
26

27 (d) Conveyance of Water Right without Conveyance of Property.
28

1 Parties are also advised that the owner of an adjudicated water right herein (except
2 an Overlying Right) may transfer the same (temporarily or permanently) without
3 conveyance of the property where the water right was developed.

4 (e) Transfer of Overlying Right. The transfer and use of Overlying
5 Rights shall be limited (as provided in Section 21 of the Judgment) as exercisable
6 only on specifically defined Overlying Lands and they cannot be separately
7 conveyed or transferred apart therefrom.

8 (f) Intervention Stipulation Required. No conveyance of water rights
9 to a person who is not a Party to the subject action shall be recognized by
10 Watermaster unless the transferee thereof files with Watermaster a Stipulation in
11 Intervention to the subject action (Exhibit "E") agreeing to be bound by the
12 Judgment herein, and until the Court approves said Stipulation and Intervention.

13 (g) Notice Required. Any transfer of water rights shall be effective
14 only when the requirements of this Section 13 are met and when the Parties file
15 with Watermaster, within fifteen (15) days of such transfer, a copy of the transfer
16 document(s) which:

- 17 (1) Identifies both the transferee(s) and the transferor(s);
- 18 (2) Accurately recites the total quantity (in acre-feet) of water
19 rights transferred;
- 20 (3) Is executed by both the transferee(s) and the transferor(s);
- 21 (4) Is acknowledged by both transferee(s) and transferor(s) in
22 a form sufficient for recordation;
- 23 (5) Lists the Designee(s) of both the transferor(s) and
24 transferee(s) to receive future service and notice of papers and process; and
25
26
27
28

1 (6) Is accompanied by a map of the service area
2 where the water was used by transferor(s) (assignors) and a map of the
3 service area where the water is intended to be used by the transferee(s)
4 (assignees). Maps need not be furnished for temporary transfers of water
5 rights unless specifically requested by Watermaster.
6

7 (h) Approved Forms of Transfer Documents and Other Forms.

8 Approved forms of such transfer documents and other approved Watermaster
9 forms are attached hereto, marked and identified as follows:

10 Exhibit "A" - Permanent Transfer of Water Rights--Prescriptive
11 Pumping Right

12 Exhibit "B" - Permanent Transfer of Water Rights--Base Annual
13 Diversion Right

14 Exhibit "C" - Permanent Transfer of Water Rights--Integrated
15 Production Right

16 Exhibit "D" - Temporary Assignment or Lease of Water Right

17 Exhibit "E" - Stipulation Re Intervention After Judgment

18 Exhibit "F" - Designee to Receive Future Notices for and on Behalf of
19 Defendant(s)

20 Exhibit "G" - Notice of Transfer of Overlying Rights With Property to
21 Which They are Appurtenant.

22 Exhibit "H" - Application To Drill Water Well

23 Exhibit "I" - Application To Modify Existing Water Well

24 Exhibit "J" - Application To Destroy Water Well

25 Exhibit "K" - Application For Water Treatment Facility

26 (i) Presumption as to Unexercised Rights. Unless otherwise noted on
27 the above mentioned transfer documents(s), it will be presumed by Watermaster
28 that the permanent transfer of water rights will include all unexercised rights

1 thereunder, including authorized carry-over of unused rights.

2 14. Operating Safe Yield. Watermaster shall annually determine the Operating
3 Safe Yield applicable to the succeeding Fiscal Year and estimate the same for the next
4 succeeding four (4) Fiscal Years. Said determination shall be made at the close of the
5 hearing thereon, which shall be commenced at Watermaster's regular meeting in May of
6 each year. Watermaster shall notify each Pumper and Integrated Producer of his share
7 thereof, stated in acre-feet per Fiscal Year. Thereafter, no Party may produce in any
8 Fiscal Year any Consumptive Use Portion of any Overlying Right, or an amount in excess
9 of the sum of his Diversion Right, if any, plus his Pumper's Share of such Operating Safe
10 Yield, or his Integrated Production Right, or the terms of any Cyclic Storage Agreement,
11 without being subject to Assessment for the purpose of purchasing Replacement Water.
12 The rate of such Assessment shall be established at the same meeting at which the
13 Operating Safe Yield is established, and it may be estimated for the years for which
14 Operating Safe Yield is estimated. In establishing the Operating Safe Yield, the
15 Watermaster shall follow all physical, economic, and other relevant parameters provided
16 in the Judgment herein. Said determination shall be made in accordance with the
17 following:
18
19
20

21 (a) Preliminary Determination. At Watermaster's regular meeting in
22 April of each year, Watermaster shall make a Preliminary Determination of the
23 Operating Safe Yield of the Basin for each of the succeeding five (5) Fiscal Years.
24 Said determination shall be made in the form of a report containing a summary
25 statement of the considerations, calculations and factors utilized by Watermaster
26 in arriving at the said Operating Safe Yield.
27

28 (b) Notice of Hearing. A copy of said Preliminary Determination

1 Report shall be mailed to all Parties at least ten (10) days prior to a hearing
2 thereon to be commenced at Watermaster's regular meeting in May of each year,
3 at which time objections or suggested corrections or modifications of said
4 determination shall be considered.

5 (c) Watermaster Final Determination and Review Thereof. Within
6 thirty (30) days after completion of said hearing, Watermaster shall mail to each
7 Pumper, Diverter, Overlying User and Integrated Producer a Final Report and
8 Determination of said Operating Safe Yield for each such Fiscal Year, together
9 with a statement of the Producer's entitlement in each such Fiscal Year stated in
10 acre-feet. Any affected Party, within thirty (30) days of mailing of notice of said
11 Watermaster determination, may petition the Court for an Order to Show Cause
12 for Review of said determination in accordance with Section 11 hereof.
13

14
15 15. Carry-over Rights.

16 (a) Pumping. Any Pumper's Share of Operating Safe Yield, and the
17 Production right of any Integrated Producer which is not Produced in a given year
18 may be carried over and accumulated for one (1) year.

19 (b) Diversions. Diverters shall be entitled to Divert for direct use up
20 to two hundred percent (200%) of their Base Annual Diversion Right in any Fiscal
21 Year, provided, that the aggregate quantities of water Diverted in any consecutive
22 ten (10) Fiscal Year period shall not exceed ten (10) times such Diverter's Base
23 Annual Diversion Right.
24

25 (c) Overlying Rights. By definition, there is no carry-over of Overlying
26 Rights.
27

28 (d) Presumption as to Carry-over Rights. The first water Produced in

1 the succeeding Fiscal Year shall be deemed Produced pursuant to such Producer's
2 Carry-over Rights.

3 16. Special Hearings. Watermaster shall conduct such special hearings as
4 deemed appropriate upon thirty (30) days notice to the Parties hereto.

5 17. Policy Decisions. No policy decision shall be made by Watermaster until
6 its next regular meeting after the question involved has been raised for discussion at a
7 Watermaster meeting and noted in the draft of minutes thereof.

8 18. Assessments. Watermaster may levy and collect Assessments from the
9 Producer Parties based upon Production during the preceding Fiscal Year. Said
10 Assessments may be for one or more of the following purposes:

11 (a) Administration Costs. At its regular May meeting Watermaster
12 shall adopt a proposed budget for the succeeding Fiscal Year and within fifteen
13 (15) days shall mail a copy thereof to each Party, together with a statement of the
14 level of Administration Assessment levied by Watermaster and which will be
15 collected for purposes of raising funds for said budget. Said Assessments shall be
16 uniformly applicable to each acre-foot of Production.

17 (b) Replacement Water Costs. Replacement Water Assessments shall
18 be collected from each Producer on account of such Party's Production in excess
19 of its Diversion Rights, Pumper's Share or Integrated Production Right, and on
20 account of the consumptive use portion of Overlying Rights, computed at the
21 applicable rates established by Watermaster, consistent with Watermaster's
22 Operating Criteria (Exhibit "H" to the Judgment).

23 (c) Make-up Obligation. An Assessment shall be levied and collected
24 equally on account of each acre-foot of Production, which does not bear a
25
26
27
28

1 Replacement Water Assessment hereunder, to pay all necessary costs of
2 administration and satisfaction of the Make-up Obligation. Such Assessment shall
3 not be applicable to water Production of an Overlying Right.

4 (d) In-Lieu Water Cost. An Assessment may be levied against all
5 Pumping to pay reimbursement for In-Lieu Water Cost except that such
6 Assessments shall not be applicable to the non-consumptive use portion of
7 Overlying Rights.
8

9 (e) Waivers Possible for Water Quality Improvement or Protection. In
10 accordance with Section 45 (e) of the Judgment, a Producer of water from the
11 Basin for the purpose of testing, protecting, or improving water quality, may apply
12 in writing by verified petition or application (hereinafter "Application") to
13 Watermaster, for approval of such water Production free of all or any part of
14 Watermaster Assessments thereon, and for waiver of one or more of the provisions
15 of Sections 25, 26, and 57 of said Judgment, where appropriate, upon terms and
16 conditions to be established by Watermaster after a noticed hearing on such
17 Application.
18

19 A waiver of Assessment shall not be granted for the purpose of
20 removal of contamination or improvement of the quality of Basin water which has,
21 or could have, resulted from the activity of the Applicant for such waiver.
22

23 In the event cleanup or Treatment Facilities are installed in the
24 Basin by or for the benefit of a Producer, and the Basin water receiving treatment
25 from said Treatment Facilities is subsequently delivered by or used for beneficial
26 purposes of such Producer, the Production of such water shall not be entitled to
27 waiver or modification of Watermaster Assessments thereon.
28

1 Notwithstanding the above, if Basin water is treated and
2 immediately percolated or reintroduced to the Basin by way of spreading,
3 injection, or otherwise, for purposes of this Section 18 (e), its Production may,
4 upon Watermaster's approval of an Application to waive or modify its
5 Assessments on the same, be entitled thereto. In any event, such water shall only
6 be percolated or reintroduced to the Basin with the consent of Watermaster and
7 said water shall be of a quality acceptable to Watermaster.
8

9 Although all Production from the Basin must be reported to
10 Watermaster on a timely basis in accordance with these Rules and Regulations,
11 Production which is granted a waiver of Assessment hereunder may, by reason of
12 certain circumstances as specifically determined by Watermaster, be deemed an
13 unused right and entitled to carry-over, in accordance with Section 49 of the
14 Judgment.
15

16 (f) Application for Waiver of Assessment. An Application for Waiver
17 of Assessment, as above set forth, shall contain all relevant information relied
18 upon by Applicant which he believes justifies the granting of said Application.
19 All such Applications shall explain the special needs and circumstances for such
20 Production and specify the approximate amounts to be Produced, the time frame
21 of such Production, the specific location(s) of the points(s) of extraction(s), and
22 the place of intended disposal of such water, as well as any supplemental or
23 additional information requested by Watermaster. All such extractions shall be
24 metered and reported quarterly to Watermaster, along with all other Basin
25 Production, in accordance with these Rules and Regulations.
26
27

28 Should an Application contain incomplete information or should

1 Watermaster desire additional, other, or further information in relation thereto, the
2 same shall also be furnished and verified by Applicant.

3 (g) Public Hearing and Effective Date. Within thirty (30) days of the
4 filing of any such Watermaster accepted Application, Watermaster shall give at
5 least thirty (30) days notice to the Designees of all Parties that it will hold a
6 public hearing on said Application. Watermaster may, after the conclusion of said
7 hearing, under then existing conditions, waive all or any part of its Assessments
8 on such Production, such waiver shall not be effective prior to the date of the
9 filing of said accepted Application, and may also waive the provisions of Sections
10 25, 26, and 57 of the Judgment herein.

11
12 The effective date for the granting of an Application to waive or
13 modify Watermaster Assessments shall be no later than ten (10) days after
14 approval thereof by Watermaster and it shall continue for the period of time
15 specified therein, unless sooner terminated or extended by Watermaster.

16
17 Nothing herein is intended to allow an increase in any Producer's
18 annual entitlement under the Judgment.

19
20 19. Levy, Notice and Adjustment of Assessments. At its regular May meeting
21 Watermaster shall also fix the rate(s) of or levy applicable Administration Assessments,
22 Replacement Water Assessments, Make-up Obligation Assessments, and In-Lieu Water
23 Cost Assessments, if any. Watermaster shall give written notice of all applicable
24 Assessments to each Party on or before August 15 of each year.

25 (a) Payment. All Watermaster Assessments shall be due and payable
26 on or before September 20, following such Assessment levy or Assessment rate
27 fixing, subject to the rights reserved in Section 37 of the Judgment, and such
28

1 Assessment shall be paid or become delinquent after September 20.

2 (b) Delinquency. Any Assessment payment which becomes delinquent
3 shall bear interest at the annual prime interest rate in effect on the first business
4 day of August of each year, plus one percent (1%). Said prime interest rates shall
5 be that fixed by the Bank of America NT&SA for its preferred borrowing on said
6 date. Said prime interest rate plus one percent (1%) shall be applicable to any
7 said delinquent Assessment payment from the due date thereof until paid,
8 provided, however, in no event shall any said delinquent Assessment bear interest
9 at a rate of less than ten percent (10%) per annum. Such delinquent Assessment
10 and said interest thereon may be collected in a Show Cause proceeding in the
11 subject action or in any other legal proceeding instituted by Watermaster, and in
12 such proceeding the Court may allow Watermaster its reasonable costs of
13 collection, including attorney's fees.
14

15
16 (c) Adjustments. By reason of Watermaster's inability to control the
17 direct costs and other charges incurred for Supplemental Water obtained from
18 Responsible Agencies, it may be necessary from time to time for Watermaster to
19 adjust the foregoing Assessments. Such Assessments may only be adjusted after
20 giving at least 15 days Notice to all Parties of the meeting at which such
21 adjustments will be considered by Watermaster.
22

23 20. Responsibility for Watermaster Assessments. Parties Producing water from
24 the Relevant Watershed and Party lessors or assignors of water rights shall be responsible
25 for Watermaster Assessments levied upon all Production. The temporary lessor or
26 assignor of water rights shall be ultimately responsible for all Watermaster Assessments
27 of non-party lessees or assignees; such non-party lessees or assignees act as the
28

1 Production agent of the lessor or assignor to the extent of the amount of such temporary
2 lease or assignment.

3 21. Over and/or Under Reporting.

4 (a) Over Reporting. Watermaster shall make refunds, in whole or in
5 part, of Assessments theretofore paid, to any Producer who has erroneously
6 overstated his Production in any sworn statement for a quarterly period required
7 hereunder and who has overpaid any Assessment for that quarter, but only upon
8 compliance by the Producer with the procedure hereinafter set forth and within the
9 time hereinafter provided.

10 Any such Producer, within one (1) year of the last day for filing of
11 the said sworn statement for the quarterly period in question, may file a verified
12 application with Watermaster requesting a refund of that portion of any
13 Assessment claimed to have been paid by reason of that Producer's erroneous
14 overstatement of Production. If incomplete information is contained in said
15 application, or if Watermaster desires other, further, or additional information than
16 that set forth in said application, the same shall also be furnished by a verified
17 statement mailed to Watermaster on behalf of Applicant within thirty (30) days of
18 the mailing of the written notice or request therefor from Watermaster to the
19 Producer's Designee, at his address as shown by Watermaster records, or the
20 application shall be deemed abandoned. Such request by Watermaster shall not
21 cause any application otherwise timely filed to be considered as not filed within
22 said one (1) year period. The Watermaster may pay any refund claimed without
23 a hearing thereon, but no application shall be denied, in whole or in part, without
24 a hearing being accorded to the Applicant, in which said hearing the Applicant
25
26
27
28

1 shall have the burden of proof. Any determination by Watermaster on any matter
2 in connection with said application shall be final and conclusive upon the said
3 Producer.

4 Any refund authorized to be paid under the provisions of this
5 Section may be paid only out of moneys realized from the appropriate
6 Watermaster Assessment levied or thereafter raised. Under election of the
7 Producer, any refund determined by Watermaster to be owing may be credited to
8 the Producer against any subsequent Assessments which might become due and
9 owing from him to Watermaster. No refunds shall be made except as authorized
10 by this section and this section may not apply to over reporting unless there has
11 been compliance with the provisions of Section 12 hereof.
12

13
14 (b) Under Reporting. If Watermaster shall have probable cause to
15 believe that the Production of water from any water Producing facility is in excess
16 of that disclosed by the sworn statements covering such water Producing facility,
17 Watermaster may cause an investigation and report to be made concerning the
18 same. Watermaster may fix the amount of water Production from such facility at
19 an amount not to exceed the maximum Production capacity thereof, provided,
20 however, where a Watermaster tested water measuring device is permanently
21 attached to such facility, the record of Production as so disclosed by such
22 measuring device shall be presumed to be accurate and the burden of proof shall
23 be upon Watermaster to establish the contrary.
24

25 A determination by Watermaster that a Producer has under reported
26 Production shall require Watermaster to give written notice thereof to such
27 Producer by mailing such notice to his Designee, at the address shown by
28

1 Watermaster records. A determination of under reporting made by Watermaster
2 shall be conclusive on any Producer who has Produced water from the facility in
3 question and the Watermaster Assessments based thereon, together with interest
4 as set forth in Section 19 (b) hereof, shall be payable forthwith, unless such
5 Producer shall file with Watermaster within ten (10) days after the mailing of such
6 notice, a written protest setting forth the ground or grounds for protesting the
7 amount of Production so fixed or the Assessments and interest thereon.
8

9 Upon the filing of such protest, Watermaster shall hold a hearing
10 at which time the total amount of water Production and the Assessments and
11 interest thereon shall be determined, which action shall be conclusive if based
12 upon substantial evidence. A notice of such hearing shall be mailed to protestant
13 at least ten (10) days before the date fixed for the hearing. Notice of the
14 determination by the Watermaster at the close of such hearing shall be mailed to
15 the protestant. The Producer shall have twenty (20) days from the date of mailing
16 of such notice to pay the Assessments fixed by Watermaster and interest thereon,
17 as fixed herein, before the same becomes delinquent.
18

19 (c) Delinquent Assessments; Interest; Costs; and Attorney's Fees.
20

21 Watermaster may bring suit in the Court having jurisdiction against any Producer
22 of water from the Basin or Relevant Watershed for the collection of any
23 delinquent Assessment and interest thereon. The Court having jurisdiction of the
24 suit may, in addition to any delinquent Assessment, award interest and reasonable
25 costs, including attorney's fees.
26

27 22. Information Concerning Offers to Purchase, Sell or Lease Water Rights.
28

Watermaster shall maintain a record of any offer to purchase, sell or lease water rights

1 reported to Watermaster, for the purpose of encouraging the orderly transfer of such rights
2 by acting as a clearing house for such information. Any person desiring to purchase, sell,
3 or lease such rights may examine such Watermaster records.

4 23. Watermaster Control of Spreading and Ground Water Storage. Except for
5 the exercise of non-consumptive uses and performance of Cyclic Storage Agreements with
6 Watermaster, no Party shall spread water within the Basin or Relevant Watershed for
7 subsequent recovery or Watermaster credit without prior Watermaster written permission
8 to do so because Watermaster has sole custody and control of all Ground Water storage
9 rights in the Basin.
10

11 24. Watermaster Annual Report. Watermaster shall annually file with the
12 Court and mail to the Parties a report of all Watermaster activities during the preceding
13 Fiscal Year, including an audited statement of all accounts and financial activities of
14 Watermaster, summaries of Diversions and Pumping, and all other pertinent information.
15 To the extent practical, said report shall be mailed to all Parties and filed with the Court
16 on or before November 1 of each Year.
17

18 25. Watermaster Stipulation Re Intervention After Judgment. Attached hereto
19 and marked "Exhibit E" is a form of Stipulation for Intervention After Judgment which
20 Watermaster will execute, file with the Court if accompanied by the necessary filing fee,
21 obtain a Court hearing date thereon, give Notice thereof and attempt to obtain an
22 approving Court Order thereon.
23

24 26. Uniform Rules and Conditions of Cyclic Storage Agreements.

25 (a) Application for Cyclic Storage Agreements. Any person or entity,
26 private or public, desiring to spread and store Supplemental Water within the
27 Basin for subsequent recovery and use or for Watermaster credit shall make
28

1 application to Watermaster for a Cyclic Storage Agreement pursuant to these
2 Uniform Rules and Conditions. Watermaster shall have first call on Supplemental
3 Water for Replacement Water, Make-up Water and for the "Alhambra Exchange"
4 before such water is made available for Cyclic Storage Agreements.

5 (b) Purpose of Cyclic Storage Agreements. All Cyclic Storage
6 Agreements shall be for the utilization of Ground Water storage capacity of the
7 Basin and for cyclic or regulatory storage of Supplemental Water.

8 (c) Available Storage Capacity. In considering the available Ground
9 Water storage capacity of the Basin for such Agreements, Watermaster shall take
10 into account the operation of the Basin under the Physical Solution provisions of
11 the Judgment.

12 (d) Provisions of Cyclic Storage Agreements. Any such Agreement
13 shall include provisions for:

14 (1) Watermaster control of all spreading (or injection) and
15 extraction scheduling and procedures for such stored waters:

16 a) The time, place, and amount of said spreading shall
17 be approved in advance by Watermaster provided, however, that
18 when the water level of the Baldwin Park Key Well is at or above
19 elevation two-hundred fifty (250) feet, spreading activities shall be
20 restricted to the easterly portion of the Basin at water spreading
21 facilities designated in advance by Watermaster, unless otherwise
22 approved by the Court;

23 (2) Calculations by Watermaster of any special costs, damages
24 or burdens resulting from such operation;
25
26
27
28

1 (3) Priorities for Cyclic Storage Agreements in the following
2 order:

3 a) Responsible Agencies on the basis of their relative
4 requirements for Replacement Water within their respective
5 corporate boundaries,

6 b) Other Parties on the basis of priority of application
7 to Watermaster for such Agreements, and
8

9 c) Non-parties;

10 (4) Determinations by Watermaster of, and accounting for, all
11 losses in stored water, assuming that such stored water floats on top of the
12 Ground Water supplies, and accounting for all losses of water which
13 otherwise would have replenished the Basin. Such losses of stored water
14 shall be assigned by Watermaster as follows:
15

16 a) First losses by non-parties in the reverse priority of
17 the earliest original dates of their respective Cyclic Storage
18 Agreements, to the whole of such non-parties' stored water,

19 b) The next losses by Parties who are not Responsible
20 Agencies in reverse priority of the earliest original dates of their
21 respective Cyclic Storage Agreements, to the whole of their stored
22 water, and
23

24 c) The last losses by Responsible Agencies to be shared
25 on the basis of water actually in storage in the Basin at the time of
26 the loss of such stored water;
27

28 (5) The priorities for spreading of Supplemental Water are

1 hereby established as follows, in the order of their priority:

2 First: Supplemental Water ordered by Watermaster from
3 Responsible Agencies for direct delivery to the Basin as
4 Replacement Water,

5 Second: Supplemental Water for delivery to the Basin for storage
6 under Cyclic Storage Agreements between Watermaster and
7 Responsible Agencies. In the event that more than one Responsible
8 Agency wishes to deliver water to Cyclic Storage simultaneously
9 and there is inadequate spreading capacity available, deliveries by
10 each Responsible Agency so desiring to deliver Supplemental
11 Water shall be scheduled so that the total quantity of water in
12 Cyclic Storage of those Agencies can be increased proportionately
13 in percent of their maximum allowed Cyclic Storage,
14

15 Third: Supplemental Water for delivery to Individual Cyclic
16 Storage accounts of Parties to the Judgment. In the event that more
17 than one Party wishes to deliver water to such Cyclic Storage
18 accounts simultaneously and there is inadequate spreading capacity
19 available, deliveries for each such Party shall be scheduled so that
20 the total quantity of water in such Parties' Individual Cyclic
21 Storage accounts can be increased proportionately in percent of
22 their maximum allowed Cyclic Storage, and
23

24 Fourth: Non-Parties as established by Watermaster at the time; and
25

26 (6) Payment to Watermaster for the benefit of Parties in said
27 action of all special costs, damages or burdens incurred (without any
28

1 charge, rent, assessment or expense as to Parties to said action by reason
2 of the adjudicated proprietary character of said storage rights, nor credit for
3 offset for benefits resulting from such storage); provided, no Party shall
4 have any direct interest in or control over such contracts or the operation
5 thereof by reason of the adjudicated right of such Party. Watermaster has
6 sole custody and control of all Ground Water storage rights in the Basin
7 pursuant to the Physical Solution in the Judgment and all said Agreements
8 are subject to review and approval of the Court.
9

10 (e) Terms of Cyclic Storage Agreements and Extensions. The term of
11 such Agreements shall not exceed five (5) years but may be extended for
12 additional terms, not to exceed five (5) years each, provided Watermaster shall
13 report its intention to consider an extension of any such Agreement in minutes of
14 its meeting held prior to its meeting when any such extension request shall be
15 acted upon.
16

17 (f) Maximum Storage. Such Agreements shall fix the maximum
18 amount of Supplemental Water to be stored in the Basin at any point in time by
19 a particular storing entity.
20

21 (g) Watermaster to be Held Harmless. The storing entity of such
22 Agreement shall save and hold harmless Watermaster, its officers, agents and
23 employees from any and all costs, damages or liability resulting from said
24 Agreement and shall provide Watermaster with the defense or costs of the defense
25 of any action brought against Watermaster, its officers, agents or employees
26 arising or alleged to arise by reason of such Agreement for storage of
27 Supplemental Water in the Basin.
28

1 (h) Reports to Watermaster. The storing entity shall quarterly report
2 to Watermaster the amount of Supplemental Water which it spreads and withdraws
3 each quarter under such Agreement. Such reports shall be due on the last day of
4 the month next succeeding the end of the relevant quarter, i.e. April 30, July 31,
5 October 31, and January 31. Such reports shall be cumulative and shall indicate
6 the credit balance of the relevant quarter.
7

8 (i) Court Approval of Cyclic Storage Agreements. Upon its approval
9 of a Cyclic Storage Agreement, Watermaster shall Petition the Court for approval
10 thereof and said Agreement shall become effective only upon such Court approval.

11 27. Responsible Agency from Whom Watermaster Shall Purchase Replacement
12 Water.
13

14 (a) Responsible Agencies. There are three Responsible Agencies within
15 or partially within the Basin. Two of such Agencies, Upper San Gabriel Valley
16 Municipal Water District (Upper District) and Three Valleys Municipal Water
17 District (Three Valleys District) are member agencies of The Metropolitan Water
18 District of Southern California (Metropolitan) and supply Watermaster with
19 Replacement Water purchased from Metropolitan. The third Responsible Agency
20 is San Gabriel Valley Municipal Water District (San Gabriel District) which has
21 contracted with the State of California and has constructed facilities to deliver
22 water from the State Water Project and, thus, can directly supply Watermaster
23 with Replacement Water.
24

25 (b) Water Used Within the Basin. For water used within the Basin, the
26 Responsible Agency within whose boundaries is located the place of use of water
27 Produced from the Basin will determine the Responsible Agency from whom
28

1 Watermaster shall purchase Replacement Water.

2 (c) Water Exported from the Basin. Except for water Produced from
3 the Basin and used within the City of Sierra Madre (for which San Gabriel District
4 shall be the Responsible Agency), the place of such Production of water exported
5 from the Basin shall determine the Responsible Agency from whom Watermaster
6 shall purchase Replacement Water.
7

8 (d) Computations of the Amount of Replacement Water to be Purchased
9 from Responsible Agencies. In computing the amount of Replacement Water to
10 be provided by a Responsible Agency, Watermaster shall:

11 (1) Determine the Replacement Water requirement of each Party
12 to the Judgment and apportion such Replacement Water requirement as
13 required in (b) and (c) above;
14

15 (2) Calculate the total Replacement Water requirement for each
16 Responsible Agency as determined in (1) above;

17 (3) Tabulate Interagency Transfers of water rights as described
18 in (e) (1) below;

19 (4) Calculate the Net Interagency Transfer adjustment as
20 described in (e) (2) below;

21 (5) Determine the adjusted Replacement Water requirements,
22 calculated for each Responsible Agency as required in (e) below; and
23

24 (6) Determine the effect of deferred Replacement Water
25 requirements as calculated in (h) below.

26 (e) Net Interagency Transfer Adjustment and Replacement Water
27 Requirement. Replacement Water requirements as heretofore calculated shall be
28

1 modified by a "Net Interagency Transfer Adjustment." "Interagency Transfer"
2 shall mean the aggregate amount of Production Right resulting from the transfer
3 (by sale or lease) of all or a portion of a Pumper's Share of Operating Safe Yield,
4 or a Base Annual Diversion Right, or the Diversion Component or Pumping
5 Component of an Integrated Production Right for use within the boundaries of a
6 Responsible Agency other than the Responsible Agency within which such water
7 rights were developed and adjudicated.
8

9 The annual Replacement Water requirement resulting from Net
10 Interagency Transfers for each Responsible Agency shall be calculated as follows:

11 (1) Net Interagency Transfers shall be calculated for each
12 Responsible Agency as the difference between such rights transferred for
13 use outside or partially outside that Responsible Agency and such rights
14 transferred for use within or partially within that Responsible Agency.
15

16 (2) Tabulate the total Interagency Transfers of water rights,
17 calculated for each of the Responsible Agencies in (1) above. The sum of
18 said total Interagency Transfers for each of the three Responsible Agencies
19 is that Responsible Agency's Net Interagency Transfer Adjustment. The
20 total of such adjustments for all Responsible Agencies shall equal zero.
21 The Responsible Agency(s) having a positive amount shall have this Net
22 Interagency Transfer Adjustment added to the Replacement Water
23 requirement computed for it in (d) (2) above. The Responsible Agency(s)
24 having a negative amount shall have this Net Interagency Transfer
25 Adjustment subtracted from the Replacement Water requirement calculated
26 for it in (d) (2) above.
27
28

1 (f) Special Provisions.

2 (1) The Replacement Water requirement calculated for each of
3 the Responsible Agencies in (e) (2) above cannot exceed the total quantity
4 of Replacement Water obligation calculated for all Responsible Agencies,
5 and/or;

6 (2) If the Replacement Water requirement calculated in (e) (2)
7 above results in a negative value, that negative value shall be adjusted to
8 zero, as described in (h) below.

9 (g) Special Provisions Re Alhambra Exchange. An adjustment shall be
10 made to San Gabriel District's calculated Replacement Water requirement, if
11 necessary, to allow Upper District to deliver an amount of Replacement Water to
12 the City of Alhambra equal to the quantity delivered through connection USG-5
13 for the previous year, the year in which the Replacement Water requirement was
14 incurred.

15 (h) Adjustments to Calculated Replacement Water Requirements.
16 Adjustments to Replacement Water requirements resulting from the calculations
17 in (f) (2) or (g) above shall be apportioned as follows:

18 (1) As between Upper District and Three Valleys District, the
19 district with a negative value shall have added to it an amount sufficient
20 to equal zero, that amount shall be subtracted from the Replacement Water
21 requirement of the other Responsible Agency, but it shall not be reduced
22 to less than zero. If a negative balance still exists, then it shall be
23 subtracted from San Gabriel District.

24 (2) If San Gabriel District's Replacement Water requirement is
25
26
27
28

1 less than zero, it shall be adjusted to zero by deducting equal amounts of
2 San Gabriel District's adjustment from both Upper District and Three
3 Valleys District.

4 (3) All adjustments shall be accumulated in a Deferred
5 Replacement Water Requirement Account for each of the Responsible
6 Agencies. In future years when deliveries of Replacement Water may be
7 made by a Responsible Agency, up to the amount, or any portion of the
8 amount, in the Deferred Replacement Water Requirement Account, such
9 deliveries will be equally subtracted from the Replacement Water
10 requirement of the Responsible Agency(s) from which it was derived in (1)
11 and/or (2) above for that year so long as such deliveries shall not cause
12 total deliveries of all Responsible Agencies to exceed the amounts
13 provided for in paragraph (f) (1) and/or paragraph (f) (2) above. At the
14 time that deliveries are made by a Responsible Agency from its Deferred
15 Replacement Water Requirement Account, Watermaster shall pay to that
16 Responsible Agency its price prevailing at that time for Replacement
17 Water.
18

19
20 (i) Advanced Delivery Account. Whenever the total quantity
21 calculated in (e) (1) above, is less than that delivered to the City of Alhambra
22 through USG-5 for the previous year, an accounting of the difference shall be
23 maintained in an "Advanced Delivery Account" and such difference, or as much
24 as possible thereof, shall be subtracted from the Replacement Water Requirement
25 of Upper District in the next year when an obligation to deliver Replacement
26 Water exists for Upper District.
27
28

1 28. Ground Water Quality Management. The Watermaster, Upper District,
2 San Gabriel District, and San Gabriel Valley Water Association, through a Joint
3 Resolution dated February-March 1989, affirmed their commitment to participate in a
4 coordinated federal, state and local response to contamination of Ground Water supplies
5 of the Basin for both the purpose of preventing additional contamination and the purpose
6 of cleaning up and limiting the spread of existing contamination. The entities adopting
7 that Joint Resolution designated and accepted Watermaster as the entity to coordinate
8 local involvement in the efforts to preserve and restore the quality of Ground Water
9 within the Basin. Watermaster sought and received additional powers from the Court to
10 regulate extractions of water from the Basin for water quality control purposes, and this
11 Section 28 is to implement the same. These efforts shall be that any New or Increased
12 Extraction to meet water needs from the Basin shall include planned treatment in existing
13 areas of High Level Degradation or Contamination. An important part of exercising these
14 additional powers and coordinating federal, state and local responses to contamination of
15 the Basin's water supplies, is the collection and compilation of essential data from
16 Producers and the expeditious distribution of such data to the proper state and federal
17 regulatory agencies involved in water quality matters in the Basin.
18
19

20
21 (a) Watermaster Approvals. Each Producer shall, after the effective
22 date of this amendment to these Rules and Regulations (June 28, 1991), apply to
23 Watermaster, on forms provided by Watermaster, for a permit to do any of the
24 following:

- 25 - Construct any well;
26 - Deepen any existing well;
27 - Modify the perforations of the casing of any existing well;
28 - Notwithstanding natural fluctuations in Basin water levels,
 physically increase or decrease the Effective Extraction
 Capacity of any existing well, including that which may occur

1 due to installation or modification of pipelines, booster pumps
2 or other distribution system components, as of said effective
3 date of these Rules and Regulations;

- 4 - Abandon any existing well; or
5 - Construct, relocate or abandon Ground Water Treatment
6 Facilities.

7 Such application will be acted upon by Watermaster no later than
8 at its first regular meeting following sixty (60) days after receipt of the complete
9 application. If an emergency exists, Watermaster shall expedite its actions to the
10 maximum extent practicable.

11 (b) Watermaster Directed Change in Water Production.

12 (1) Based on available data, Watermaster's Five-Year Plan, and/or
13 Ground Water modeling, Watermaster will, for water quality protection
14 purposes, direct any Producer to increase, decrease or cease Production
15 from existing wells, initiate new well Production or deliver water to or
16 accept water from another water system or direct a Producer to obtain
17 water from another source in-lieu of Pumping from its own wells, or take
18 other appropriate actions in compliance with an approved Watermaster plan
19 by giving such Producer advanced written notice thereof, specifying a time
20 certain for compliance.

21 (2) The increase in cost to a Producer resulting from a
22 Watermaster directed change in water Production shall not be borne by the
23 Producer, but will be reimbursed to the Producer by Watermaster through
24 In-Lieu Water Assessments levied by Watermaster, unless such funding is
25 made available from other sources such as federal, state or local
26 governmental entities or by those found to be responsible for the
27 contamination in the Basin which caused Watermaster to direct the change
28

1 in Production by the Producer.

2 (c) Producer Data, Initial Submittal. After June 28, 1991, Producers
3 shall submit, within sixty (60) days of Watermaster's request, initial data in a form
4 acceptable to Watermaster, to update and ensure the accuracy of the existing Basin
5 database. The data shall include:

6 (1) Identification and location of all Active, Inactive or
7 Abandoned Wells;

8 (2) Water quality data concerning organic compounds, nitrates and
9 any other water quality parameters as specified by Watermaster, including
10 all data from other sampling Producers may conduct in addition to
11 governmental requirements;

12 (3) Available construction details of each well owned or operated
13 by Producer, as well as all logs (driller's, electric, etc.);

14 (4) Depths or zones from which water is extracted from each
15 well, if available; and

16 (5) A current map of the main water transmission system of
17 Producer's distribution system showing the location and sizes of
18 transmission mains and storage reservoirs, all interconnections with other
19 systems and their sizes and capacities, and any other data pertinent to the
20 transmission (but not distribution to customers) of water through the
21 Producer's system.

22 (d) Quarterly Reports. After the initial submittal of data per
23 subparagraph (c) above, the following data shall be submitted by all Producers to
24 Watermaster quarterly, on or before the last day of January, April, July and
25
26
27
28

1 October:

2 (1) Chemical water quality data collected during the quarter and
3 provided to any state, federal or local public agency;

4 (2) Data described under Section 28 (c) (3), (4) and (5) hereof
5 which supplement, amend or change the data previously submitted by a
6 Producer; and
7

8 (3) All data from other sampling which Producers may conduct
9 in addition to governmental requirements.

10 (e) Operating Principles. Any New or Increased Extraction by a
11 Producer in the Basin to meet water supply needs shall have prior Watermaster
12 approval, shall not contribute to contaminant migration, and shall include planned
13 treatment in existing areas of High-level Degradation and Contamination. In
14 giving such approval, Watermaster shall consider the cumulative effects of
15 multiple actions by all Producers in the area of concern by using available
16 information, the Five-Year Plan, and Ground Water modeling.
17

18 (f) Emergency Exemptions. Where a Producer's water supply or water
19 quality problem is so urgent that the viable option for maintaining an adequate
20 short-term supply that meets drinking water standards involves an action in
21 conflict with the operating principles outlined in Section 28 (e) hereof,
22 Watermaster may approve a short-term action contingent upon the Applicant
23 Producer concurrently submitting an acceptable long-term action plan with
24 acceptable deadlines for implementation. In general, the long-term action plan
25 must be approved prior to or concurrently with the short-term action.
26

27 (g) Water Quality and Supply Plans. To assure that Pumping does not
28

1 lead to further degradation of water quality in the Basin, a Five-Year Water
2 Quality and Supply Plan must be prepared and updated annually by Watermaster,
3 projecting water supply requirements and water quality conditions for each period
4 of five (5) calendar years beginning November 1, 1991, and each November 1
5 thereafter. This Plan will also include a water quality monitoring element to
6 obtain supplemental information as needed to assist in projecting contamination
7 levels. Watermaster will supply the Producers with projections of contaminant
8 migration by June 1 of each year for the preparation of these Water Quality and
9 Supply Plans.
10

11 Each purveyor of potable water produced from the Basin shall
12 submit the following information to Watermaster by July 31 of each year:
13

14 (1) Projected quarterly water supply requirements for each of the
15 following five calendar years and the proposed pumping rates, in gallons
16 per minute, for each well;

17 (2) Identification of each Production well known to contain
18 contaminants and the contaminant levels;

19 (3) Proposed methods for meeting the water supply requirements
20 of the system if contaminant levels are, or are projected by Watermaster
21 to become, greater than drinking water standards; and
22

23 (4) Any intended treatment facility.

24 Watermaster shall analyze the information submitted by Producers and
25 develop an overall draft Basin Water Quality and Supply Plan. A draft Plan will
26 be submitted by Watermaster to the Los Angeles Regional Water Quality Control
27 Board, and for public review and comment per Section 28 (i) hereof, by November
28

1. Appropriate modifications resulting from comments received will be reflected in the final draft, and a staff report providing an explanation of decisions will be made available.

(h) Ground Water Treatment Facilities.

(1) Producers in the Basin shall notify Watermaster in advance at the initial stages of planning of their intent to construct any Facility to remove volatile organic compounds (VOCs) and/or nitrates from water Produced from the Basin. Such notice shall include the following information:

- the intended location and a description of the Treatment Facility;
- the water production capacity;
- the rate of contaminant removal capacity;
- the expected concentration of all identified contaminants in the water to be treated;
- the expected concentration of all identified contaminants in the water after treatment;
- the intended disposition of all water to be treated;
- the expected initiation date and period of time over which the Treatment Facility will operate; and
- the expected capital and operating costs of the Treatment Facility.

(2) In addition, the Producer shall describe all necessary permits and/or all permits for which it has applied or has received from all regulatory agencies with regard to such Treatment Facility and shall supply to Watermaster copies of all environmental documents required under the California Environmental Quality Act and/or the National Environmental Protection Act. No construction of such Treatment Facilities shall be initiated without the prior written approval of Watermaster. Watermaster shall promptly examine each submittal for compatibility with available

1 information, the Five-Year Plan and the operating principles, and notify the
2 Applicant of its findings and decision regarding such proposed Treatment
3 Facility no later than at its first regular meeting following sixty (60) days
4 after receipt of a complete submittal by the Producer. Watermaster will
5 also report its determination to the Los Angeles Regional Water Quality
6 Control Board.
7

8 (3) All operators of Treatment Facilities shall report quarterly to
9 Watermaster at least the following information:

- 10 - name or other designation of the Treatment Facility;
- 11 - quantity of water treated during quarter;
- 12 - quantity of each contaminant removed;
- 13 - quality of water before treatment, at beginning and end of
each quarter;
- 14 - quality of water after treatment, at beginning and end of
each quarter; and
- 15 - operation and maintenance costs for each quarter.

16 (i) Decision Making Process, Hearings and Appeals.

17 (1) All Watermaster determinations relating to the control of
18 Pumping for water quality purposes shall be based upon a staff
19 recommendation and information and recommendations received from or
20 furnished by affected Producers. Staff's recommendation shall result from
21 staff's analysis of information presented by interested Parties, all available
22 water quality data, Watermaster's Five-Year Plan, Ground Water modeling
23 and other water quality trend analysis reports, and will be based on the
24 operating principles set forth in these rules. Staff shall provide supporting
25 data to document each recommendation that it makes to Watermaster.
26 After consideration of the staff recommendation and public comment
27 provided at the Watermaster meeting, Watermaster shall make a final
28

1 decision.

2 (2) Public hearings on Watermaster's draft annual Five-Year
3 Water Quality and Supply Plan will be held following a thirty (30) day
4 public review and comment period. A copy of such draft will be sent to
5 all Parties to the Judgment as well as to all other interested Parties by
6 November 1 of each year along with a notice of the date, time and place
7 of the public hearing, to be scheduled not less than thirty (30) days after
8 the mailing date of the draft Plan. A notice of public hearing will also be
9 published in the San Gabriel Valley's key local newspaper(s) at the
10 beginning of the public review period. Consideration of comments
11 received is described in Section 28 (g) hereof.
12

13 (3) Appeal of a Watermaster decision may be made to the
14 Watermaster who shall notice and consider the same at a public hearing.
15 Actions by the Watermaster are subject to review by the Court. Any Party
16 may, by a regularly noticed motion, petition the Court for review of
17 Watermaster's action or decision. Notice of such motion shall be served
18 and filed within ninety (90) days after such Watermaster action or decision.
19
20
21
22
23
24
25
26
27
28

APPENDIX "A"

DEFINITIONS

(a) Base Annual Diversion Right -- The average annual quantity of water which a Diverter has the right to Divert for Direct Use.

(b) Direct Use -- Beneficial use of water other than for spreading or Ground Water recharge.

(c) Divert or Diverting -- To take waters of any surface stream within the Relevant Watershed.

(d) Diverter -- Any Party who Diverts.

(e) Elevation -- Feet above mean sea level.

(f) Fiscal Year -- The period July 1 through June 30, following.

(g) Ground Water -- Water beneath the surface of the ground and within the zone of saturation.

(h) Ground Water Basin -- An interconnected permeable geologic formation capable of storing a substantial Ground Water supply.

(i) Integrated Producer -- Any Party that is both a Pumper and a Diverter, and has elected to have its rights adjudicated under the optional formula provided in Section 18 of the Amended Judgement.

(j) In-Lieu Water Cost -- The differential between a particular Producer's cost of Watermaster directed Produced, treated, blended, substituted or Supplemental Water delivered or substituted to, for, or taken by such Producer in-lieu of his cost of otherwise normally producing a like amount of Ground Water.

(k) Judgment -- Judgment entered in Los Angeles Superior Court Civil Action No. 924128, entitled "Upper San Gabriel Valley Municipal Water District v. City of

1 Alhambra, et al," as amended.

2 (l) Key Well -- Baldwin Park Key Well, being elsewhere designated as State
3 Well No. 1S/10W-7R2, or Los Angeles County, Department of Public Works, Well No.
4 3030-F. Said well has a ground surface elevation of 386.7.

5 (m) Long Beach Case -- Los Angeles Superior Court Case No. 722647, entitled
6 "The Board of Water Commissioners of the City of Long Beach, et al, v. San Gabriel
7 Valley Water Company, et al."

8
9 (n) Main San Gabriel Basin or Basin -- The Ground Water Basin underlying
10 the area shown as such on Exhibit "A" of the Judgment.

11 (o) Make-up Obligation -- The total cost of meeting the obligation of the Basin
12 to the area at or below Whittier Narrows, pursuant to the Judgment in the Long Beach
13 Case.

14
15 (p) Minimal Producer -- Any Producer whose Production in any Fiscal Year
16 does not exceed five (5) acre-feet.

17 (q) Natural Safe Yield -- The quantity of natural water supply which can be
18 extracted annually from the Basin under conditions of the long-term average annual
19 supply, net of the requirement to meet downstream rights as determined in the Long
20 Beach Case (exclusive of Pumped export), and under cultural conditions as of a particular
21 year.

22
23 (r) Operating Safe Yield -- The quantity of water which Watermaster
24 determines may be Pumped from the Basin in a particular Fiscal Year, free of the
25 Replacement Water Assessment under the Physical Solution of the Judgment.

26 (s) Overdraft -- A condition wherein the total annual Production from the
27 Basin exceeds the Natural Safe Yield thereof.
28

1 (t) Overlying Rights -- The right to Produce water from the Basin for use on
2 Overlying Lands, which rights are exercisable only on specifically defined Overlying
3 Lands and which cannot be separately conveyed or transferred apart therefrom.

4 (u) Physical Solution -- The Court-decreed method of managing the waters of
5 the Basin so as to achieve the maximum utilization of the Basin and its water supply,
6 consistent with the rights declared in the Judgment.
7

8 (v) Prescriptive Pumping Right -- The highest continuous extraction of water
9 by a Pumper from the Basin for beneficial use in any five (5) consecutive years after
10 commencement of Overdraft and prior to filing of the action, as to which there has been
11 no cessation of use by that Pumper during any subsequent period of five (5) consecutive
12 years prior to the filing of said action.
13

14 (w) Produce or Producing -- To Pump or Divert water from the Basin.

15 (x) Producer -- A Party who Produces water from the Basin.

16 (y) Production -- The annual quantity of water Produced from the Basin, stated
17 in acre-feet.

18 (z) Pump or Pumping -- To extract ground water from the Basin by Pumping
19 or by any other method.
20

21 (aa) Pumper -- A Party who Pumps water.

22 (bb) Pumper's Share -- A Pumper's right to a percentage of the entire Natural
23 Safe Yield, Operating Safe Yield and appurtenant Ground Water storage of the Basin.

24 (cc) Reclaimed Water -- Water which, as a result of treatment of waste, is
25 suitable for a direct beneficial use or a controlled use that would not otherwise occur.

26 (dd) Relevant Watershed -- That portion of the San Gabriel River Watershed
27 tributary to Whittier Narrows which is shown as such on Exhibit "A" to the Judgment and
28

1 the exterior boundaries of which are described in Exhibit "B" of the Judgment.

2 (ee) Replacement Water -- Water purchased by Watermaster to replace: (1)
3 Production in excess of a Pumper's Share of Operating Safe Yield; (2) the consumptive
4 use portion resulting from the exercise of an Overlying Right; and (3) Production in
5 excess of a Diverter's right to Divert for Direct Use.

6
7 (ff) Responsible Agency -- The municipal water district which is the normal
8 and appropriate source from whom Watermaster shall purchase Supplemental Water for
9 replacement purposes under the Physical Solution of the Judgment, being one of the
10 following:

11 (1) Upper District -- Upper San Gabriel Valley Municipal Water
12 District, a member public agency of The Metropolitan Water District of Southern
13 California (MWD).

14
15 (2) San Gabriel District -- San Gabriel Valley Municipal Water District,
16 which has a direct contract with the State of California for State Project water.

17 (3) Three Valleys District -- Three Valleys Municipal Water District,
18 a member public agency of MWD.

19 (gg) Stored Water -- Supplemental Water stored in the Basin pursuant to a
20 Cyclic Storage Agreement with Watermaster as authorized by Section 34(n) of the
21 Judgment herein.

22
23 (hh) Supplemental Water -- Nontributary water imported through a Responsible
24 Agency and Reclaimed Water.

25 (ii) Transporting Parties -- Any Party who has transported water from the
26 Relevant Watershed or Basin to an area outside thereof within the Year immediately
27 preceding the entry of Judgment, and any Party presently or hereafter having an interest
28

1 in lands or having a service area outside the Basin or Relevant Watershed contiguous to
2 lands in which it has an interest or a service area within the Basin or Relevant Watershed.
3 Division by a road, highway, or easement shall not interrupt contiguity. Said term shall
4 also include the City of Sierra Madre, or any Party supplying water thereto, so long as
5 the corporate limits of said City are included within one of the Responsible Agencies.
6

7 (jj) Water Level -- The measured Elevation of water in the Key Well, corrected
8 for any temporary effects of mounding caused by replenishment or local depressions
9 caused by Pumping.

10 (kk) Year -- A calendar year, unless the context clearly indicates a contrary
11 meaning.
12

13 **The following are supplemental definitions relating to Section 28 of these rules**
14 **and regulations.**

15 (ll) New Extraction -- Any extraction from the Main San Gabriel Basin using
16 a well or other Ground Water extraction facility that becomes active for the first time for
17 water supply purposes on or after June 28, 1991.

18 (mm) Increased Extraction (Decreased) -- Any modification to an existing well
19 or extraction facility that physically increases (or decreases) the Effective Extraction
20 Capacity of that well or extraction facility. Such modifications may include: (1)
21 changing the well depth, (2) modifying the perforation intervals, (3) modifying the pump
22 and/or motor, (4) installing or modifying distribution pipelines, (5) installing or modifying
23 booster pumps, and (6) installing or modifying other distribution system components.
24 Normal maintenance work would be excluded.
25

26 (nn) Effective Extraction Capacity -- The actual capacity of a well or extraction
27 facility to extract Ground Water from the Basin using the pumping equipment and system
28

1 appurtenances in good working order as they existed on June 28, 1991.

2 (oo) Treatment Facility -- Any facility that provides treatment for contaminated
3 Ground Water in order to meet drinking water standards.

4 (pp) Planned Treatment -- A specific Treatment Facility with a designated
5 source of Ground Water supply and schedule for development.

6 (qq) Active Well -- Any well used or that could be used without modifications
7 to extract Ground Water.

8 (rr) Inactive Well -- Any well that is not in service at the time of filing of an
9 application hereinunder.

10 (ss) Abandoned Well -- A well that has been abandoned in accordance with the
11 provisions of state, county or local laws and regulations.

12 (tt) High-level Degradation and Contamination -- Ground Water containing
13 contaminants in excess of the federal or state maximum contaminant level. Some areas
14 of the Basin contain higher contaminant concentrations than others and Treatment
15 Facilities shall be planned to extract Ground Water from the higher level areas of
16 contamination in the Basin.
17
18
19
20
21
22
23
24
25
26
27
28

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

APPENDIX "B"

SUMMARY OF CRITICAL DATES AND ACTIONS FOR WATERMASTER

This summary of critical dates and actions for Watermaster is presented for the convenience of Watermaster members, the Parties and others in carrying out the provisions of the Court Judgment. It does not necessarily include all critical dates and actions under the Judgment.

SUMMARY OF CRITICAL DATES AND ACTIONS FOR WATERMASTER

1. Watermaster members' terms of office.

January 1 - December 31.

2. Watermaster's first meeting in January.

(a) Election of Watermaster Chairman and Vice-Chairman (from Watermaster membership) and selection of Secretary, Treasurer and assistants (who may, but need not, be Watermaster members). Watermaster Rules and Regulations, Section 6 (R/R 6)

(b) Order Engineering Report for Preliminary Determination of Operating Safe Yield. (R/R 14(a))

3. January 31 - Quarterly Reports, as required by the Rules and Regulations, of Production (R/R 13), Cyclic Storage (R/R 26(h)) and data required by Section 28 (d), due to Watermaster.

4. March - Receive San Gabriel River Watermaster Report.

5. Watermaster's first meeting in April.

Watermaster shall make a Preliminary Determination of the Operating Safe Yield of the Basin for the next five Fiscal Years and mail a copy thereof to all Parties at least ten (10) days prior to a hearing thereon and which said hearing shall commence at Watermaster's first meeting in May. (R/R 14(a))

6. April 30 - Quarterly Reports, as required by the Rules and Regulations, of Production (R/R 13), Cyclic Storage (R/R 26(h)) and data required by Section 28 (d), due to Watermaster.

7. Watermaster's first meeting in May.

(a) Hearing on Preliminary Determination for Watermaster to make Final

1 Determination of Operating Safe Yield. (R/R 14(b))

2 Within thirty (30) days of the Final Determination of the Operating Safe Yield a
3 copy of the Final Report and Determination must be mailed to each Pumper and
4 Integrated Producer, including a statement of their entitlements under such
5 Determination. (R/R 14(c))

6 (b) Budget.

7 Adopt a proposed Administration Budget for the succeeding Fiscal Year and
8 within fifteen (15) days mail a copy thereof together with a statement of the level
9 of the Administration Assessment levied by Watermaster which will be collected
10 for purposes of raising the necessary funds for said budget. (R/R 18(a))

11 (c) Assessments.

12 In addition to the Administration Assessment, Watermaster shall levy the
13 Replacement Water Assessment, Make-up Obligation Assessment and the In-lieu
14 Water Assessments, if any. (R/R 19)

15 8. June 1 - Watermaster to supply Producers with projections of contaminant
16 migration by June 1. (R/R 28(g))

17 9. July - Authorize preparation of Annual Watermaster Report. Receive tentative
18 budget from San Gabriel River Watermaster.

19 10. July 31 - Quarterly Reports, as required by the Rules and Regulations, of
20 Production (R/R 13), Cyclic Storage (R/R 26(h)) and data required by Section 28
21 (d), due to Watermaster. Producers of potable water from the Basin must submit
22 to Watermaster the data required by Section 28(g).

23 11. August 15 - On or before this date Watermaster must give written notice of all
24 applicable Assessments to all Parties. (R/R 19)

12. September 20 - All Assessments payable to Watermaster. (R/R 19(a))
13. September 30 - Must pay Upper Area share of San Gabriel River Watermaster budget by this date.
14. October 1 - Mail Notice of Nomination Election of Producer representatives to be held at Watermaster's November meeting. (R/R 9(a))
15. October 31 - Quarterly Reports, as required by the Rules and Regulations, of Production (R/R 13), Cyclic Storage (R/R 26(h)) and data required by Section 28 (d), due to Watermaster.
16. November
- (a) Watermaster Annual Report filed with the Court and copies mailed to each Party by November 1. (R/R 24)
- (b) Draft Annual Five-Year Water Quality and Supply Plan under Section 28 (g) to be filed with the Los Angeles Regional Quality Control Board and circulated for public review and comment by November 1.
- (c) Prior to Watermaster's meeting in November, nomination of Public Representatives to Watermaster by Upper District and San Gabriel District.
- (d) Watermaster's meeting in November--election of six Producer Representatives for nomination to Watermaster. (R/R 9(b)) Petition Court for confirmation of nominees and give notice of hearing on Petition to all Parties.
- Within ninety (90) days of a vacancy on Watermaster, it shall be filled by nomination by Upper District or San Gabriel District if for a Public Representative and by a special election at a Watermaster meeting for a Producer Representative, after notice thereof to all Parties, and Watermaster Petition (and notice thereof to all parties) for Court confirmation of nominee. (R/R 10)

PERMANENT TRANSFER OF WATER RIGHTS - PRESCRIPTIVE PUMPING RIGHT

For a valuable consideration, receipt of which is hereby acknowledged, _____, ("Seller") does hereby assign and transfer in perpetuity to _____, ("Buyer") all rights to the quantity of _____ acre-feet of the "Prescriptive Pumping Right" and the appropriate % of "Pumper's Share" adjudicated to Seller or his predecessor in the Judgement in the case of "Upper San Gabriel Valley Municipal Water District, v. City of Alhambra, et al," Los Angeles Superior Court No. 924128, together with all the attendant rights, powers and privileges pertaining thereto.

(Check appropriate provision)

This transfer does [] does not [] include _____ acre-feet of "carry-over of unused rights" associated with said transferred rights and in existence on the date hereof.

DATED: _____

BUYER

SELLER

(Signature)

Name of Designee (of Buyer) to receive
service of Processes & Notices:

Address _____

Telephone No.: _____

(Signature)

Name of Designee (of Seller) to receive
service of Processes & Notices:

Address _____

Telephone No.: _____

To be executed by both Buyer and Seller and, if separately requested by Watermaster, be accompanied by a map of the service area where the water was used by Seller and a map of the service area where the water is intended to be used by the Buyer.

(Have the appropriate individual(s) or corporate attached acknowledgments completed by both Buyer and Seller as part of the transfer)

A TRUE COPY HEREOF MUST BE FILED WITH WATERMASTER WITHIN 15 DAYS OF EXECUTION.

(To be accompanied by completed Exhibit "E" if Buyer is not a party to the Judgment)

EXHIBIT "A"

CORPORATE ACKNOWLEDGMENT

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES)^{ss.}

On this _____ day of _____, 199__, before me, the undersigned Notary Public, personally appeared

_____,
_____ known to me
_____ proved to me on the basis of satisfactory evidence to be the person(s) who executed the within Instrument as

_____,
or on behalf of the Corporation therein named and acknowledged to me that the Corporation executed it.

WITNESS my hand and official seal.

Signature _____

Name (Typed or Printed)
Notary Public in and for said
County and State

(SEAL)

INDIVIDUAL(s) ACKNOWLEDGMENT

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES)^{ss.}

On this _____ day of _____, 199__ before me, the undersigned Notary Public, personally appeared

_____,
_____ known to me
_____ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s)
_____ subscribed to the within instrument and acknowledged to me that _____ executed the same.

WITNESS my hand and official seal.

Signature _____

Name (Typed or Printed)
Notary Public in and for said
County and State

(SEAL)

PERMANENT TRANSFER OF WATER RIGHTS - BASE ANNUAL DIVERSION RIGHT

For a valuable consideration, receipt of which is hereby acknowledged, _____, ("Seller") does hereby assign and transfer in perpetuity to _____, ("Buyer") all rights to the quantity of _____ acre-feet of the "Base Annual Diversion Right" adjudicated to Seller or his predecessor in the Judgment in the case of "Upper San Gabriel Valley Municipal Water District, v. City of Alhambra, et al.," Los Angeles Superior Court No. 924128, together with all the attendant rights, powers and privileges pertaining thereto.

DATED: _____

BUYER

SELLER

(Signature)

(Signature)

Name of Designee (of Buyer) to receive
service of Processes & Notices:

Name of Designee (of Seller) to receive
service of Processes & Notices:

Address

Address

Telephone No.: _____

Telephone No.: _____

To be executed by both Buyer and Seller and, if separately requested by Watermaster, be accompanied by a map of the service area where the water was used by Seller and a map of the service area where the water is intended to be used by the Buyer.

(Have the appropriate individual(s) or corporate attached acknowledgments completed by both Buyer and Seller as part of the transfer)

A TRUE COPY HEREOF MUST BE FILED WITH WATERMASTER WITHIN 15 DAYS OF EXECUTION.

(To be accompanied by completed Exhibit "E" if Buyer is not a party to the Judgment)

EXHIBIT "B"

CORPORATE ACKNOWLEDGMENT

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) ^{ss.}

On this _____ day of _____, 199__, before me, the undersigned Notary Public, personally appeared

_____,
_____ known to me
_____ proved to me on the basis of satisfactory evidence to be the person(s) who executed the within Instrument as

_____,
or on behalf of the Corporation therein named and acknowledged to me that the Corporation executed it.

WITNESS my hand and official seal.

Signature _____

Name (Typed or Printed)
Notary Public in and for said
County and State

(SEAL)

INDIVIDUAL(s) ACKNOWLEDGMENT

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) ^{ss.}

On this _____ day of _____, 199__ before me, the undersigned Notary Public, personally appeared

_____,
_____ known to me
_____ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s)
_____ subscribed to the within instrument and acknowledged to me that _____ executed the same.

WITNESS my hand and official seal.

Signature _____

Name (Typed or Printed)
Notary Public in and for said
County and State

(SEAL)

PERMANENT TRANSFER OF WATER RIGHTS - INTEGRATED PRODUCTION RIGHT

For a valuable consideration, receipt of which is hereby acknowledged, _____, ("Seller") does hereby assign and transfer in perpetuity to _____, ("Buyer") all rights to the quantity of _____ acre-feet of the "Prescriptive Pumping Component" and the appropriate % of "Pumper's Share" together with _____ acre-feet of "Diversion Component" adjudicated to Seller or his predecessor in the Judgment in the case of "Upper San Gabriel Valley Municipal Water District, v. City of Alhambra, et al," Los Angeles Superior Court No. 924128, together with all the attendant rights, powers and privileges pertaining thereto.

(Check appropriate provision)

This transfer does ☐ does not ☐ include _____ acre-feet of "carry-over of unused rights" associated with said transferred rights and in existence on the date hereof.

DATED: _____

BUYER

SELLER

(Signature)

Name of Designee (of Buyer) to receive
service of Processes & Notices:

Address

Telephone No.: _____

(Signature)

Name of Designee (of Seller) to receive
service of Processes & Notices:

Address

Telephone No.: _____

To be executed by both Buyer and Seller and, if separately requested by Watermaster, be accompanied by a map of the service area where the water was used by Seller and a map of the service area where the water is intended to be used by the Buyer.

(Have the appropriate individual(s) or corporate attached acknowledgments completed by both Buyer and Seller as part of the transfer)

A TRUE COPY HEREOF MUST BE FILED WITH WATERMASTER WITHIN 15 DAYS OF EXECUTION.

(To be accompanied by completed Exhibit "E" if Buyer is not a party to the Judgment)

EXHIBIT "C"

CORPORATE ACKNOWLEDGMENT

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) ^{ss.}

On this _____ day of _____, 199__, before me, the undersigned Notary Public, personally appeared

_____,
_____ known to me
_____ proved to me on the basis of satisfactory evidence to be the person(s) who executed the within Instrument as

or on behalf of the Corporation therein named and acknowledged to me that the Corporation executed it.

WITNESS my hand and official seal.

Signature _____

Name (Typed or Printed)
Notary Public in and for said
County and State

(SEAL)

INDIVIDUAL(s) ACKNOWLEDGMENT

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) ^{ss.}

On this _____ day of _____, 199__ before me, the undersigned Notary Public, personally appeared

_____,
_____ known to me
_____ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s)
_____ subscribed to the within instrument and acknowledged to me that _____ executed the same.

WITNESS my hand and official seal.

Signature _____

Name (Typed or Printed)
Notary Public in and for said
County and State

(SEAL)

TEMPORARY ASSIGNMENT OR LEASE OF WATER RIGHT

For a valuable consideration, receipt of which is hereby acknowledged, _____,

("Assignor") does hereby assign and transfer to _____, ("Assignee") commencing on _____ and terminating on _____, the following water right(s):

(Check the following appropriate category)

☐ Production Right _____ AF

☐ Prescriptive Pumping Right _____ AF

☐ Base Annual Diversion Right _____ AF

☐ Integrated Production Right (consisting of _____ acre-feet of "Prescriptive Pumping Component" and _____ acre-feet of "Diversion Component")

☐ Carry-over Right _____ AF

adjudicated to Assignor or his predecessor in the Judgment in the case of "Upper San Gabriel Valley Municipal Water District v. City of Alhambra, et al," Los Angeles Superior Court No. 924128.

Said assignment is made upon condition that:

- (1) Assignee shall exercise said right on behalf of Assignor for the period described hereinabove and the first water produced by Assignee from the Relevant Watershed of the Main San Gabriel Basin after the date hereof shall be that produced hereunder;
- (2) Assignee shall put all waters utilized pursuant to said transfer to reasonable beneficial use; and
- (3) Assignee shall pay all Watermaster assessments on account of the water production hereby assigned or leased.

DATED: _____

ASSIGNEE

ASSIGNOR

(Signature)

Name of Designee (of Assignee) to receive service of Processes & Notices:

Signature

Name of Designee (of Assignor) to receive service of Processes & Notices:

Address

Telephone No. of Designee: _____

Address

Telephone No. of Designee: _____

To be executed by both Assignee and Assignor and, if separately requested by Watermaster, be accompanied by a map of the service area where the water was used by Assignor and a map of the service area where the water is intended to be used by the Assignee.

(Have the appropriate individual(s) or corporate attached acknowledgments completed as part of the temporary transfer)

A TRUE COPY HEREOF MUST BE FILED WITH WATERMASTER WITHIN 15 DAYS OF EXECUTION.

(To be accompanied by completed Exhibit "E" if Assignee is not a party to the Judgment)

EXHIBIT "D"

D-1

CORPORATE ACKNOWLEDGMENT

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) ^{ss.}

On this _____ day of _____, 199__, before me, the undersigned Notary Public, personally appeared

_____,
_____ known to me
_____ proved to me on the basis of satisfactory evidence to be the person(s) who executed the within Instrument as

or on behalf of the Corporation therein named and acknowledged to me that the Corporation executed it.

WITNESS my hand and official seal.

Signature _____

Name (Typed or Printed)
Notary Public in and for said
County and State

(SEAL)

INDIVIDUAL(s) ACKNOWLEDGMENT

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) ^{ss.}

On this _____ day of _____, 199__ before me, the undersigned Notary Public, personally appeared

_____,
_____ known to me
_____ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s)
_____ subscribed to the within instrument and acknowledged to me that _____ executed the same.

WITNESS my hand and official seal.

Signature _____

Name (Typed or Printed)
Notary Public in and for said
County and State

(SEAL)

Attorney for Watermaster

SUPERIOR COURT OF THE STATE OF CALIFORNIA

FOR THE COUNTY OF LOS ANGELES

UPPER SAN GABRIEL VALLEY)
MUNICIPAL WATER DISTRICT,)

NO. 924128
STIPULATION RE INTERVENTION
AFTER JUDGMENT

Plaintiff,)

v.)

OF _____
as Defendant(s)

CITY OF ALHAMBRA, ET AL.,)

Defendants.)

IT IS HEREBY STIPULATED by and between the Main San Gabriel
Basin Watermaster for and on behalf of all parties to the instant action (pursuant to
Section 57 of the amended Judgment) and _____

_____ the proposed Intervenor(s) herein, that
said proposed Intervenor(s) may intervene in the instant action and become entitled
to all of the benefits and bound by all of the burdens of the Judgment herein.

The Court will consider the attached proposed Order confirming said
Intervention at _____ o'clock _____ M on _____ 199____, in
Department _____ located at _____

Watermaster shall give at least 30 days notice to the parties herein of
said hearing.

Exhibit "E"

E-1

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

DATED: _____

Watermaster

By _____
Chairman

Attest:

Secretary

DATED: _____

Intervenor(s)

By _____

By _____

Name of Intervenor's Designee:

Address of Designee:

Telephone Number of Designee:

Exhibit "E"

1
2
3
4
5
6
7
8
9
10 SUPERIOR COURT OF THE STATE OF CALIFORNIA

11 FOR THE COUNTY OF LOS ANGELES

12 UPPER SAN GABRIEL VALLEY)

NO. 924128

13 MUNICIPAL WATER DISTRICT,)

DESIGNEE TO RECEIVE FUTURE NOTICES
FOR AND ON BEHALF OF DEFENDANT(S)

Plaintiff,)

14 v.)

15 CITY OF ALHAMBRA, ET AL.,)

Defendants.)

16 Defendant(s) _____ hereby

17 designate(s): _____ whose address is:

18
19 and whose telephone number is _____ as said defendant's

20 Designee to receive service of all future notices, determinations, requests, demands,
21 objections, reports and other papers and processes to be served upon said
22 defendant(s) or delivered to said defendant(s) herein.

23 A copy hereof has been served upon the Watermaster herein, by mail,
24 on _____, 199____.

25 Executed under penalties of perjury at _____
26 California, this _____ day of _____, 199____.

27
28 Exhibit "F"

**NOTICE OF TRANSFER OF OVERLYING RIGHTS
WITH PROPERTY TO WHICH THEY ARE APPURTENANT**

On _____, 19____, the undersigned (or his predecessor),
adjudged Overlying Rights on the property described in Exhibit 1 attached hereto and
by this inference incorporated herein, in the case of "UPPER SAN GABRIEL VALLEY
MUNICIPAL WATER DISTRICT, v. CITY OF ALHAMBRA, ET AL," Los Angeles
Superior Court No. 924128, transferred said property and said Overlying Rights
appurtenant thereto to _____,
whose address is _____, and
whose telephone number is _____.

That said transferee hereby names _____
whose address is _____
and whose telephone number is _____ as his/her Designee to
receive all future notices and processes in said action.

DATED _____

BUYER

SELLER

To be executed by both Buyer and Seller and, if separately requested by Watermaster,
be accompanied by a map of the service area where the water was used by Seller and
a map of the service area where the water is intended to be used by Buyer.

(Have the appropriate individual(s) or corporate attached acknowledgements completed
as part of the transfer, and include Exhibit 1)

A TRUE COPY HEREOF MUST BE FILED WITH WATERMASTER WITHIN 15 DAYS
OF EXECUTION

(To be accompanied by completed Exhibit "E" if Buyer is not a party to the Judgment)

Exhibit "G"

CORPORATE ACKNOWLEDGMENT

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) ^{ss.}

On this _____ day of _____, 199__, before me, the undersigned Notary Public, personally appeared

_____ known to me

_____ proved to me on the basis of satisfactory evidence to be the person(s) who executed the within Instrument as

_____ or on behalf of the Corporation therein named and acknowledged to me that the Corporation executed it.

WITNESS my hand and official seal.

Signature _____

Name (Typed or Printed)
Notary Public in and for said
County and State

(SEAL)

INDIVIDUAL(s) ACKNOWLEDGMENT

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) ^{ss.}

On this _____ day of _____, 199__ before me, the undersigned Notary Public, personally appeared

_____ known to me

_____ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) _____ subscribed to the within instrument and acknowledged to me that _____ executed the same.

WITNESS my hand and official seal.

Signature _____

Name (Typed or Printed)
Notary Public in and for said
County and State

(SEAL)

Mailing Address:
25 East Huntington Drive
Monrovia, CA 91016

MAIN SAN GABRIEL BASIN WATERMASTER

SUPERIOR COURT CASE NO. 924128-LOS ANGELES COUNTY

(State Well Number)
(Recordation Number)
(Owner's Designation) (To Be Completed by Watermaster)

APPLICATION TO DRILL WATER WELL

(1) APPLICANT:

Name _____
Address _____

(2) LOCATION OF PROPOSED WELL:

Well Address: _____
Township, Range, and Section _____
Thomas Brothers Guide (Please indicate year, page number and
coordinates.) _____

Assessors Parcel No. _____

(Please attach copy of a map or sketch showing well location
relative to streets or other major landmarks.) _____

(3) NAME OF WELL DRILLING CONTRACTOR: _____

(4) PROPOSED USE:

Municipal ☐ Irrigation ☐
Domestic ☐ Industrial ☐
Water Quality Cleanup ☐
Other ☐

(5) DRILLING EQUIPMENT:

Rotary ☐
Cable ☐
Other ☐

(6) PROPOSED WELL CHARACTERISTICS:

A. Casing Installed:

STEEL ☐ PLASTIC ☐
OTHER ☐

Gravel Packed:

Yes ☐ No ☐ Size _____

From ft	To ft	Diam.	Gage or Wall	Diameter of Bore	Packed	
					From ft	To ft

Size of shoe or well ring: _____

Describe joint _____

B. Perforations or Screen:

Type of perforation or size of screen _____

From	To	Perf.	Rows	Slot
ft.	ft.	per row	per ft.	Size

C. Construction:

Will a surface sanitary seal be provided? Yes ☐ No ☐

To what depth? _____ ft.

Is any strata anticipated to be sealed against pollution?

Yes ☐ No ☐

If yes, note anticipated depth of strata

from _____ ft. to _____ ft.

from _____ ft. to _____ ft.

Proposed method of sealing _____

(7) WELL TESTS:

Will a pump test be made? Yes ☐ No ☐ If yes by whom? _____

Anticipated Well Yield _____

Will a chemical analysis be made? Yes ☐ No ☐

Will an electric log be made of well? Yes ☐ No ☐

(If yes, file copy with Watermaster upon well completion)

(8) PROPOSED PUMPING EQUIPMENT:

(A) Pump

Electric ☐ Natural Gas ☐

Propane ☐ Diesel ☐

Other ☐

(B) Make _____

(C) Pump Size (hp) _____ (gpm) _____

(D) Design Efficiency _____

(9) PROXIMITY TO POTENTIAL SOURCES OF CONTAMINATION:

(A) Distance to nearest sewer line or septic tank
(ft) _____

(B) Wells (Please provide distance, direction and name of nearest
upgradient well(s) with volatile organic chemical or nitrate levels
above a maximum contaminant level, if known.) _____

(10) Please provide copy of County of Los Angeles permits and
State Department of Water Resources Water Well Driller
Reports and any other permits for construction of a new well
upon completion of proposed well.

(11) Please provide Watermaster with copies of all feasibility
studies, alternative water supply sources, water quality studies
or other reports which validate the Applicant's need to drill a
new well. Applicant must provide supporting data to show
compliance with the requirements of Section 28 with particular
reference to Section 28(e) of Watermaster's Rules and
Regulations.

I hereby agree to comply with all regulations of the Main San
Gabriel Basin Watermaster pertaining to well construction,
operation, repair, modification, destruction and inactivation.
The applicant will furnish the Watermaster a complete well log
upon completion of well construction.

Submitted for Applicant by: _____

Signature: _____

Title: _____

Date: _____

Date Received by Watermaster: _____

Watermaster Action:

Approved ☐ Denied ☐

Date of Action: _____

Permit Number: _____

By: _____

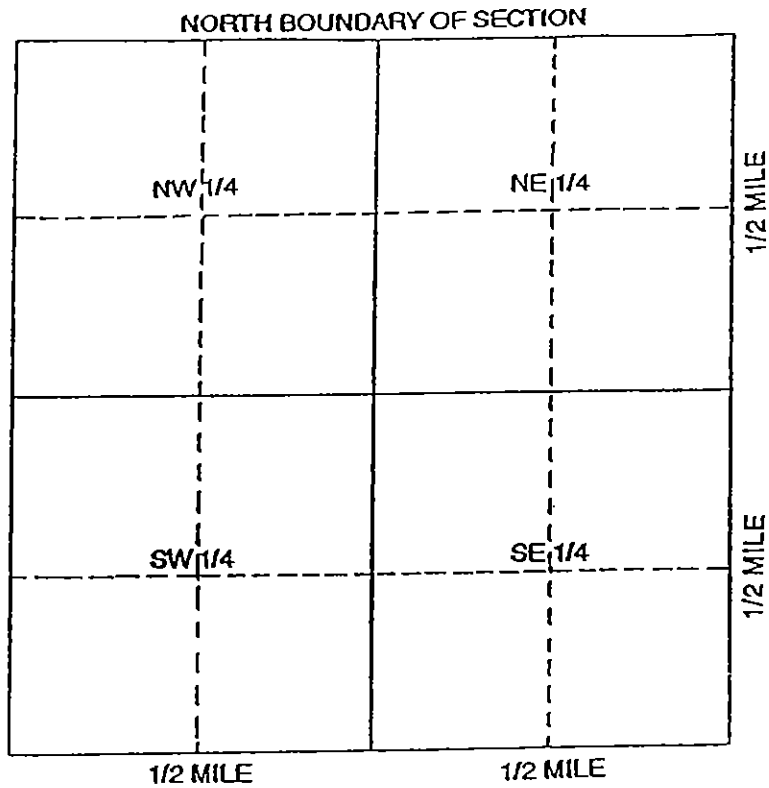
(Name)

(Title)

EXHIBIT "H"

H-1

WELL LOCATION SKETCH



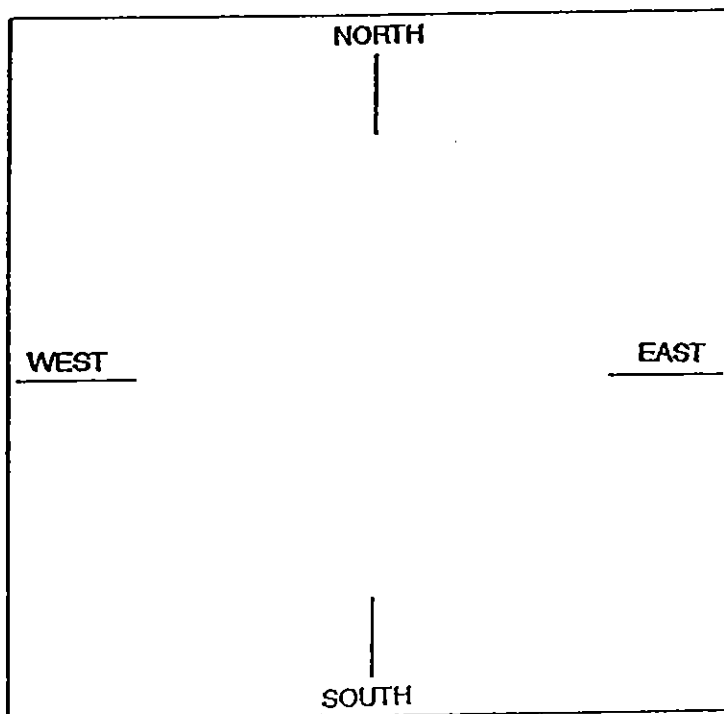
Township _____ N/S

Range _____ E/W

Section No. _____

A. Location of well in sectionized areas.

Sketch roads, railroads, streams, or other features as necessary.



B. Location of well in areas not sectionized.

Sketch roads, railroads, streams, or other features as necessary.

Indicate distances.

MAIN SAN GABRIEL BASIN WATERMASTER

SUPERIOR COURT CASE NO. 924128-LOS ANGELES COUNTY

(State Well Number)

(Recordation Number)

(Owner's Designation)

APPLICATION TO MODIFY EXISTING WATER WELL

(1) APPLICANT:

Name _____
Address _____

(2) LOCATION OF WELL:

Well Address: _____
Township, Range, and Section _____
Thomas Brothers Guide (Please indicate year, page number and coordinates.) _____

Assessor's Parcel No. _____
(Please attach copy of a map or sketch showing well location relative to streets or other major landmarks.) _____

(3) NAME OF WELL DRILLING CONTRACTOR:

(4) TYPE OF WORK (check):

Deepening ☐ Modify Perforations ☐ Increase Yield ☐

Reconditioning ☐ Other ☐

(5) PROPOSED USE (check):

Municipal ☐ Irrigation ☐

Domestic ☐ Industrial ☐

Water Quality Cleanup ☐

Other ☐

(6) DRILLING EQUIPMENT:

Rotary ☐

Cable ☐

Other ☐

(7A) CASING INSTALLED (existing):

STEEL ☐ PLASTIC ☐

OTHER ☐

Gravel Packed:

Yes ☐ No ☐ Size _____

From ft.	To ft.	Diam. ft.	Gage or Wall ft.	Diameter of Bore ft.	Packed	
					From ft.	To ft.

Size of shoe or well ring: _____

Describe joint _____

(7B) CASING INSTALLED (proposed):

STEEL ☐ PLASTIC ☐

OTHER ☐

Gravel Packed:

Yes ☐ No ☐ Size _____

From ft.	To ft.	Diam. ft.	Gage or Wall ft.	Diameter of Bore ft.	Packed	
					From ft.	To ft.

Size of shoe or well ring: _____

Describe joint _____

(8A) PERFORATIONS OR SCREEN (existing):

Type of perforation or size of screen

From ft.	To ft.	Perf. per row	Rows per ft.	Slot Size

(8B) PERFORATIONS OR SCREEN (proposed):

Type of perforation or size of screen

From ft.	To ft.	Perf. per row	Rows per ft.	Slot Size

(9A) EXISTING CONSTRUCTION:

Was a surface sanitary seal provided? Yes ☐ No ☐

To what depth? _____ ft.

Were any strata sealed against pollution? Yes ☐ No ☐

If yes, note depth of strata

from _____ ft. to _____ ft.

from _____ ft. to _____ ft.

Method of sealing _____

(9B) PROPOSED CONSTRUCTION:

Will a surface sanitary seal be provided? Yes ☐ No ☐

To what depth? _____ ft.

Were any strata sealed against pollution? Yes ☐ No ☐

If yes, note depth of strata

from _____ ft. to _____ ft.

from _____ ft. to _____ ft.

Method of sealing _____

(10) WELL TESTS:

Was pump test made? Yes ☐ No ☐ (If yes, attach most recent copy)

_____ gal. min. with _____ ft. drawdown after _____ hrs.

Temperature of water _____

Was a chemical analysis made? Yes ☐ No ☐

Was electric log made of well? Yes ☐ No ☐

(If yes, attach most recent copy)

(11) WELL LOG:

Total depth _____ ft. Depth of completed well _____ ft.

Formation: Describe by color, character, size of material and

structure _____ ft. to _____ ft.

(Please attach copy of existing well log. If well log is not available, describe well lithology in space provided or on attached page.)

(12) HISTORIC WELL MODIFICATIONS:

(On an attached page, please provide a chronology of all historic well modifications which may have affected well yield or water quality.)

(13A) EXISTING WELL PUMP DATA:

A. Pump Type:

Electric ☐ Natural Gas ☐ Other ☐

Diesel ☐ Propane ☐

B. Pump Performance

Horsepower _____ GPM _____

Efficiency _____

(13B) PROPOSED WELL PUMP DATA:

A. Pump Type:

Electric ☐ Natural Gas ☐ Other ☐

Diesel ☐ Propane ☐

B. Pump Performance

Horsepower _____ GPM _____

Efficiency _____

(14) Please provide copy of County of Los Angeles permits and State Department of Water Resources Water Well Drillers Report and any other permits for modification of an existing well upon completion of modification of well.

(15) Please provide Watermaster with copies of all feasibility studies, alternative water supply sources, water quality studies or other reports which validate the Applicant's need to modify this well. Applicant must provide supporting data to show compliance with the requirements of Section 28 with particular reference to Section 28(e) of Watermaster's Rules and Regulations.

I hereby agree to comply with all regulations of the Main San Gabriel Basin Watermaster pertaining to well construction, operation, repair, modification, destruction and inactivation. The Applicant will furnish the Watermaster a complete well log upon completion of well modification.

Submitted for Applicant by: _____

Signature: _____

Title: _____

Date: _____

Date Received by Watermaster: _____

Watermaster Action:

Approved ☐ Denied ☐

Date of Action: _____

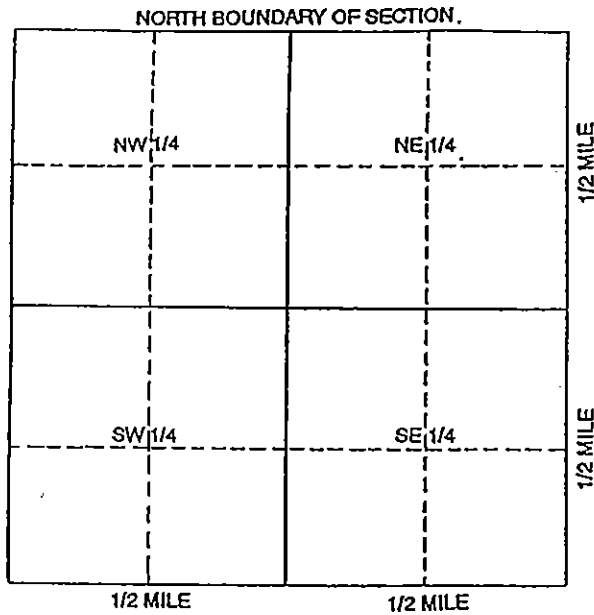
Permit Number: _____

By: _____

(Name)

(Title)

WELL LOCATION SKETCH



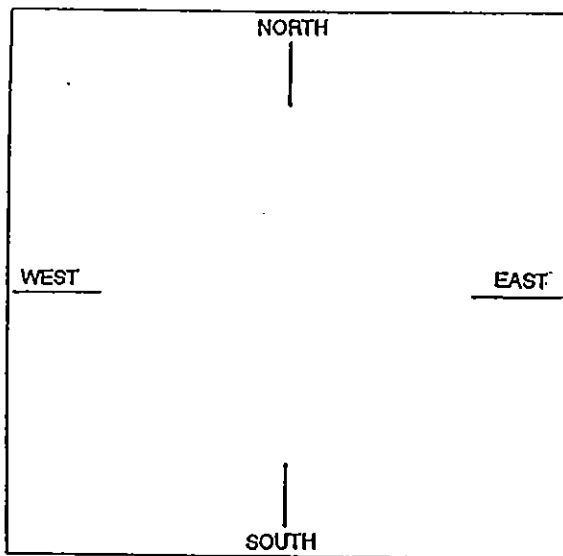
Township _____ N/S

Range _____ E/W

Section No. _____

A. Location of well in sectionized areas.

Sketch roads, railroads, streams, or other features as necessary.



B. Location of well in areas not sectionized.

Sketch roads, railroads, streams, or other features as necessary.

Indicate distances.

MAIN SAN GABRIEL BASIN WATERMASTER

SUPERIOR COURT CASE NO. 924128-LOS ANGELES COUNTY

(State Well Number)

(Recordation Number)

(Owner's Designation)

APPLICATION TO DESTROY WATER WELL

(1) APPLICANT:

Name _____

Address _____

(2) LOCATION OF WELL:

Well Address: _____

Township, Range, and Section _____

Thomas Brothers Guide (Please indicate year, page number and coordinates.) _____

Assessor's Parcel No. _____

(Please attach copy of a map or sketch showing well location relative to streets or other major landmarks.) _____

(3) NAME OF WELL DRILLING CONTRACTOR: _____

(4) PURPOSE FOR DESTROYING WELL

Water Quality ☐ Physical ☐

Other ☐ _____

(5) CURRENT USE:

Municipal ☐ Irrigation ☐

Domestic ☐ Industrial ☐

Water Quality Cleanup ☐

Other ☐ _____

(6) EXISTING CASING INSTALLED:

STEEL ☐ PLASTIC ☐

OTHER ☐ _____

Gravel Packed:

Yes ☐ No ☐ Size _____

From ft.	To ft.	Diam.	Gage or Wall	Diameter of Bore	Packed	
					From ft.	To ft.

Size of shoe or well ring: _____

Describe joint _____

(7) EXISTING PERFORATIONS OR SCREEN:

Type of perforation or size of screen

From ft.	To ft.	Perf. per row	Rows per ft.	Slot Size

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes ☐ No ☐

To what depth? _____ ft.

Were any strata sealed against pollution? Yes ☐ No ☐

If yes, note depth of strata

from _____ ft. to _____ ft.

from _____ ft. to _____ ft.

Method of sealing _____

(9) WELL LOG: (Please provide a copy of well log.)

Total depth _____ ft. Depth of completed well _____ ft.

Formation: Describe by color, character, size of material and structure if well log cannot be provided.

_____ ft. to _____ ft.

(10) METHOD OF DESTROYING: (Please provide an explanation of how the well is to be destroyed including drawings showing the proposed method of destroying. Please provide copy of County of Los Angeles permits and State Department of Water Resources Water Well Drillers reports and any other permits for destruction of well following destruction of the well.)

I hereby agree to comply with all regulations of the Main San Gabriel Basin Watermaster pertaining to well construction, operation, repair, modification, destruction and inactivation. The Applicant will notify the Watermaster upon completion of well destruction.

Submitted for Applicant by: _____

Signature: _____

Title: _____

Date: _____

Date Received by Watermaster: _____

Watermaster Action:

Approved ☐ Denied ☐

Date of Action: _____

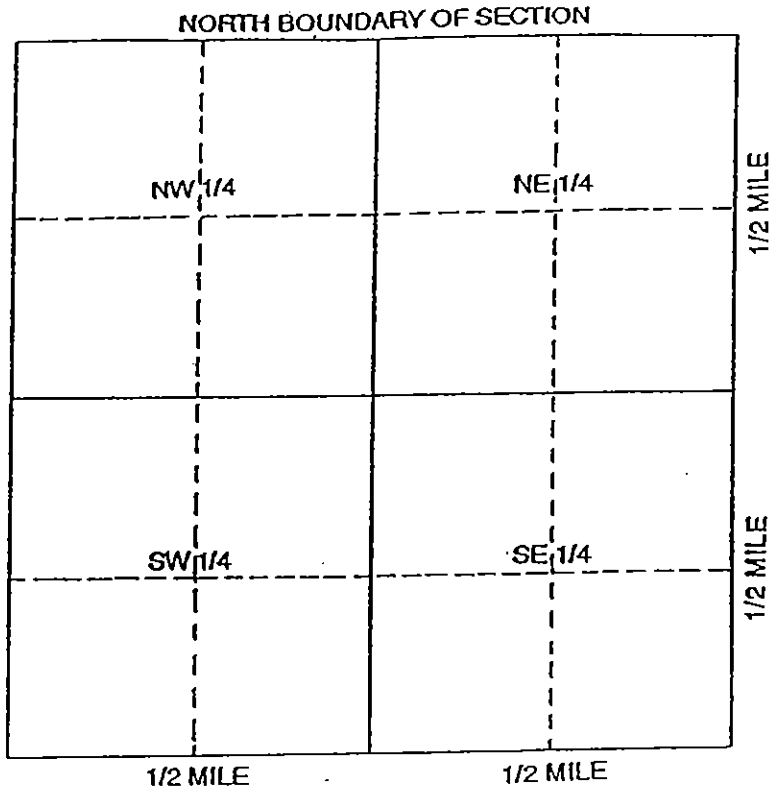
Permit Number: _____

By: _____

(Name)

(Title)

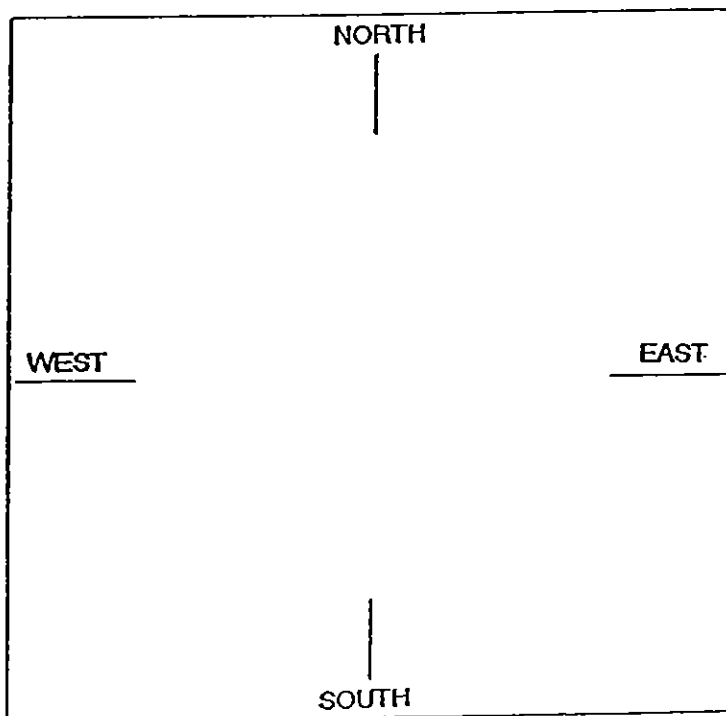
WELL LOCATION SKETCH



Township _____ N/S
 Range _____ E/W
 Section No. _____

A. Location of well in sectionized areas.

Sketch roads, railroads, streams, or other features as necessary.



B. Location of well in areas not sectionized.

Sketch roads, railroads, streams, or other features as necessary.

Indicate distances.

MAIN SAN GABRIEL BASIN WATERMASTER

SUPERIOR COURT CASE NO. 024128-LOS ANGELES COUNTY

APPLICATION FOR WATER TREATMENT FACILITY

(1) APPLICANT:

Name _____
Address _____

(2) LOCATION OF TREATMENT FACILITY:

Address _____

Thomas Brothers Guide (Please indicate year, page number and coordinates.) _____

(Please include a map showing the location of the treatment facility relative to streets, buildings, water system facilities and other points of reference.)

(3) (A) NAME OF WATER TREATMENT FACILITY CONTRACTOR:

(B) NAME OF DESIGN ENGINEER AND STATE REGISTRATION NUMBER: _____

(4) PROPOSED ACTION AT TREATMENT FACILITY

Construction ☐ Modification ☐ Removal ☐
Destruction ☐ Other ☐

(5) DESCRIPTION OF FACILITY:

(A) Type of treatment:

Volatile Organic Chemical ☐ Nitrate ☐ Other ☐

(B) Please describe the treatment process to be used at the proposed treatment plant.

(C) Please list, by Owner Designation, all wells to be treated:

(6) ANTICIPATED TREATMENT FACILITY CAPACITY:

Gallons Per Minute _____

Acres-foot Per Year _____

(7) EXPECTED CONCENTRATION OF CONTAMINANTS:

Contaminant	Contaminant		
	Influent Concentration (Parts per Billion)	Effluent Concentration (Parts per Billion)	Removal Rate (Percent)
Trichloroethylene (TCE)	_____	_____	_____
Tetrachloroethylene (PCE)	_____	_____	_____
1,1,1-Trichloroethane (1,1,1-TCA)	_____	_____	_____
Carbon Tetrachloride (CTC)	_____	_____	_____
1,1-Dichloroethylene (1,1-DCE)	_____	_____	_____
1,1-Dichloroethane (1,1-DCA)	_____	_____	_____
1,2-Dichloroethane (1,2-DCA)	_____	_____	_____

Others: _____

(8) DISPOSITION OF ALL TREATED WATER:

(Please describe disposition of all treated water, and the corresponding annual amount of discharge.)

(9) INITIAL START-UP DATE: _____

(10) EXPECTED OPERATING SCHEDULE:

(A) Daily schedule _____

(B) Number of days each month (Please specify if operating schedule varies month to month)

(11) EXPECTED COSTS:

(A) Capital costs: \$ _____

(B) Operation and maintenance: \$ _____/AF.

(12) REGULATORY PERMITS: Please describe all necessary permits and/or all permits for which you have applied or have received from all regulatory agencies with regard to the proposed treatment facility. Please supply to Watermaster copies of all environmental documents required under the California Environmental Quality Act and/or the National Environmental Protection Act.

(13) Applicant acknowledges it will comply with all portions of Section 28 of Watermaster's Rules and Regulations pertaining to quarterly data submittal, for treatment plant operation, to Watermaster. Specifically, at least the following data shall be provided on a quarterly basis:

- Name or other designation of treatment facility;
- Quantity of water treated during quarter;
- Quantity of each contaminant removed;
- Quality of water before treatment, at beginning and end of each quarter;
- Quality of water after treatment, at beginning and end of each quarter; and
- Operation and maintenance costs for each quarter.

14) Please provide Watermaster with copies of all feasibility studies, alternative water supply sources, water quality studies or other report which validate the Applicant's need to install a water treatment facility. Applicant must provide supporting data to show compliance with the requirements of Section 28 with particular reference to Section 28(h) of Watermaster's Rules and Regulations.

Applicant must provide supporting data to show compliance with the requirements of Section 28 with particular reference to Section 28(h) of Watermaster's Rules and Regulations.

I hereby agree to comply with all regulations of the Main San Gabriel Basin Watermaster pertaining to treatment plant construction, operation, repair, modification, destruction and inactivation.

Submitted For Applicant By: _____

Signature: _____

Title: _____

Date Received by Watermaster: _____

Watermaster Action:

Approved ☐ Denied ☐

Date of Action: _____

Permit Number: _____

By: _____

(Name)

(Title)

EXHIBIT "K"

K-1

APPENDIX F

Five-Year Water Quality and Supply Plan

Five-Year Water Quality and Supply Plan

November 2004



Main San Gabriel Basin
WATERMASTER

Telephone (626) 815-1300 • Fax (626) 815-1303
725 North Azusa Avenue • Azusa, California 91702
www.watermaster.org

CONTENTS

I. INTRODUCTION	2
PURPOSE OF THE FIVE-YEAR PLAN	2
WATERMASTER BACKGROUND	2
Figure 1. Area Covered by Main San Gabriel Basin	3
II. CURRENT WATER SUPPLY CONDITIONS	4
WATER SUPPLY INFLOWS DURING 2003-04	4
Figure 2. Average Rainfall During the Last Ten Years	4
Figure 3. Key Well Elevations During the Last Ten Years	5
Figure 4. Water Stored in San Gabriel Canyon Reservoirs	6
PROJECTED GROUNDWATER DEMANDS	6
Figure 5. Projected and Historical Water Production	7
OTHER EXTRACTIONS	7
III. CURRENT WATER QUALITY CONDITIONS	8
PRIMARY CONTAMINANTS IN THE GROUNDWATER BASIN	9
Figure 6. Volatile Organic Compound Levels in Groundwater	10
Figure 7. Nitrate Levels in Groundwater	10
WELLS ASSESSED FOR VULNERABILITY TO CONTAMINATION	13
Figure 8(a) Wells Vulnerable to VOC Contamination Within the Next Five Years	14
Figure 8(b) Wells Vulnerable to Nitrate Contamination Within the Next Five Years	15
Figure 8(c) Wells Vulnerable to Potential Perchlorate Contamination Within the Next Five Years	16
IV. FIVE-YEAR WATER QUALITY AND SUPPLY PLAN	17
GROUNDWATER MONITORING PROGRAMS	17
GROUNDWATER ELEVATION MONITORING	18
GROUNDWATER QUALITY MONITORING	19
GROUNDWATER FLOW AND CONTAMINANT MIGRATION STUDIES	19
GROUNDWATER CLEANUP PROJECTS	20
Figure 9. Simulated 2003-04 Basin Groundwater Contours	21
Figure 10. Simulated 2008-09 Basin Groundwater Contours	22
WATERMASTER CLEANUP PROJECTS/USEPA OPERABLE UNIT PLANS	23
Figure 11. Location Map of USEPA Operable Units	24
Figures 12-17. Location Maps of Individual Operable Units	25-26
PRODUCERS' WATER SUPPLY PLANS	34
CONDUCT STUDIES, MONITORING AND INVESTIGATIONS	34
IDENTIFY AND REDUCE POTENTIAL SOURCES OF CONTAMINATION	35
AQUIFER PERFORMANCE TESTS	35
V. DIRECTORY TO APPENDICES	36
Appendix A. Projected Groundwater Demands — 2004-05 to 2008-09	
Appendix B. Simulated Changes in Groundwater Elevations at Wells or Wellfields in Main San Gabriel Basin	
Appendix C. Highlights of Volatile Organic Compounds and Nitrate Concentrations, and Wells Vulnerable to Contamination	
Appendix D. Potential Sites for Aquifer Performance Tests	
Appendix E. Schedule and Preliminary Budget for 2004-05 Five-Year Plan	

INTRODUCTION

Watermaster prepares and annually updates this Five-Year Water Quality and Supply Plan (Five-Year Plan) in accordance with the requirements of Section 28 of its Rules and Regulations. The objective is to coordinate groundwater-related activities so that both water supply and water quality in the Main San Gabriel Basin (Basin) are protected and improved.

PURPOSE OF THE FIVE-YEAR PLAN

Many important issues are detailed in the Five-Year Plan, including how Watermaster plans to:

1. monitor groundwater supply and quality;
2. develop projections of future groundwater supply and quality;
3. review and cooperate on cleanup projects, and provide technical assistance to other agencies;
4. assure that pumping does not lead to further degradation of water quality in the Basin;
5. address perchlorate, N-nitrosodimethylamine (NDMA), and other emerging contaminants in the Basin;
6. develop a cleanup and water supply program consistent with the U.S. Environmental Protection Agency (USEPA) plans for its San Gabriel Basin Superfund sites; and
7. coordinate and manage the design, permitting, construction, and performance evaluation of the BPOU cleanup and water supply plan.

WATERMASTER BACKGROUND

The Los Angeles County Superior Court created the Main San Gabriel Basin Watermaster in 1973 to resolve water issues that had arisen among water users in the San Gabriel Valley. Watermaster's mission was to generally manage the water supply of the Main San Gabriel Groundwater Basin.

During the late 1970s and early 1980s, significant groundwater contamination was discovered in the Basin. The contamination was caused in part by past practices of

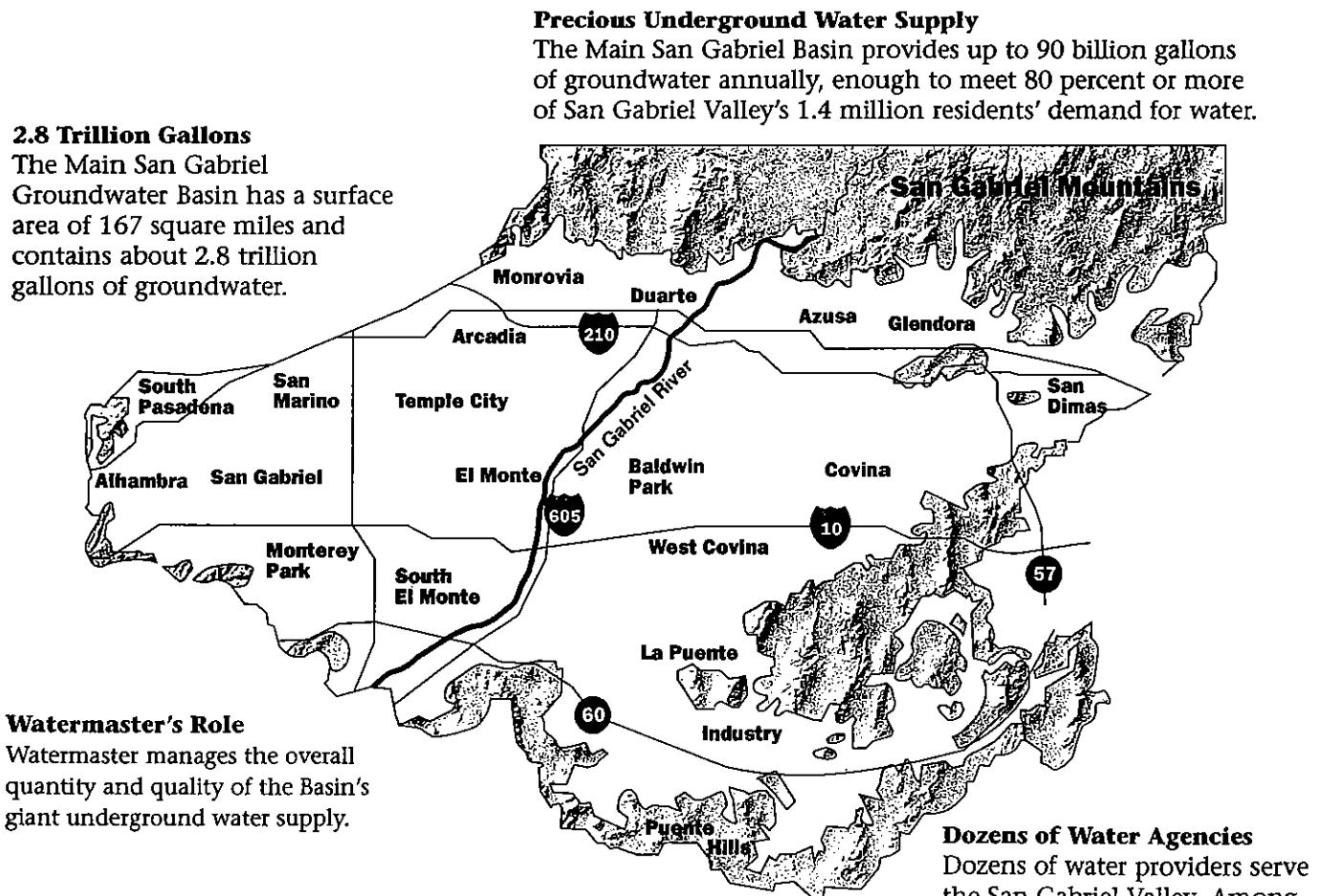
local industries that had carelessly disposed of industrial solvents (VOCs), as well as by agricultural operations that infiltrated nitrates into the groundwater. Cleanup efforts were undertaken at the local, state, and federal level.

WATERMASTER RECEIVES WATER QUALITY RESPONSIBILITIES

By 1989, local water agencies adopted a joint resolution regarding water quality issues that stated that Watermaster should coordinate local activities aimed at preserving and restoring the quality of groundwater in the Basin. The joint resolution also called for a cleanup plan.

In 1991, the Court granted Watermaster the authority to control pumping for water quality purposes. Accordingly, Watermaster added Section 28 to its Rules and Regulations regarding water quality management. The new responsibilities included developing this Five-Year Water Quality and Supply Plan, updating it annually, and submitting it to the California Regional Water Quality Control Board, Los Angeles Region, and making it available for public review by November 1 of each year.

Figure 1. AREA COVERED BY MAIN SAN GABRIEL BASIN



CURRENT WATER SUPPLY CONDITIONS

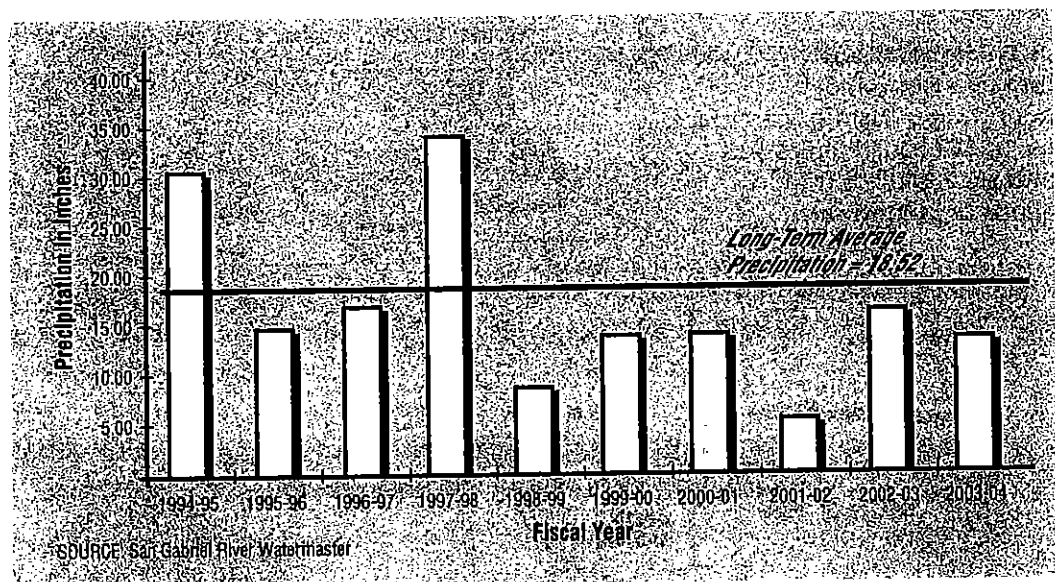
During 2003-04, rainfall in the San Gabriel Valley was about 75% of average. As a result of below average rainfall, recharge of storm water runoff was also below average. Despite dry weather over the past six years, Watermaster has successfully maintained groundwater levels above the lower end of the Basin operating range through careful groundwater management. In 2003, Watermaster made arrangements to deliver imported water for groundwater replenishment during the summer and fall when groundwater demand is very high. In 2004, only limited amounts of imported water were available through the summer.

WATER SUPPLY INFLOWS DURING 2003-04

RAINFALL NEAR LONG-TERM AVERAGE

In 2003-04, the San Gabriel Valley received 13.6 inches of rain, about 75% of the long-term average of 18.52 inches.

Figure 2. AVERAGE RAINFALL DURING THE LAST TEN YEARS



Rainfall in 2003-04 was 13.6 inches. Average precipitation in the Main San Gabriel Basin from 1994-95 to 2003-04 was 17.8 inches.

The rainfall total is made up of an average taken from four stations located in San Dimas, Diamond Bar, El Monte, and Pasadena.

LOCAL STORMWATER CAPTURE SIGNIFICANTLY DOWN

Rainfall during fiscal year 2003-04 was about 75% of the 10-year average but occurred as several high intensity storms. Consequently, about 77,000 acre-feet of stormwater runoff in local streams and channels was captured and recharged into the groundwater Basin through spreading basins. This is also about 75% of the long-term average of 100,000 acre-feet.

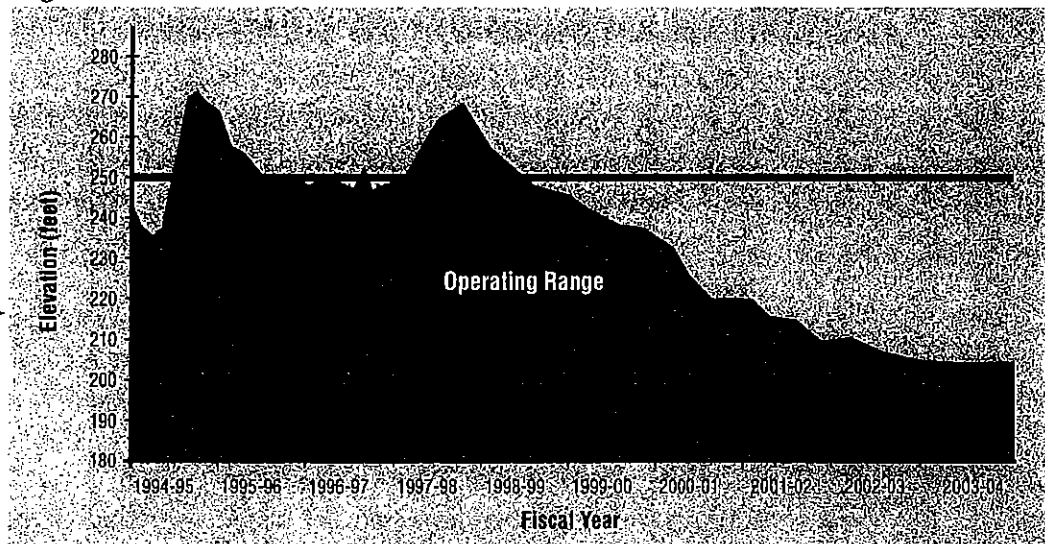
WATER IMPORTS WELL ABOVE AVERAGE

Approximately 119,000 acre-feet of water was imported into the Basin in 2003-04, and consisting of about 51,000 acre-feet of treated water and about 68,000 acre-feet of untreated water for groundwater recharge from Northern California. This quantity is significantly greater than the 10-year average of about 70,000 acre-feet. The increase is partially the result of increased short-term reliance on treated, imported water to offset the loss of groundwater from wells that were shut down due to increasing levels of contaminants and partially the result of Watermaster's actions to recharge additional imported water to maintain the groundwater elevation at the Baldwin Park Key Well above 200 feet.

KEY WELL NEAR LOW END OF OPERATING RANGE

The groundwater levels at the Key Well — located in Baldwin Park and used as the benchmark for determining the groundwater level for the entire Basin — fell from 212 feet above mean sea level on June 30, 2002, to 204 feet at the end of June 2003. As a result of Watermaster's Basin Management practices, the Baldwin Park Key Well elevation was maintained at 204 feet at the end of June 2004. The goal of Watermaster is to keep the Key Well water level between 200 feet and 250 feet. Despite five out of six years of below average rainfall Watermaster has maintained the level above the low end of the recommended operating range for the Basin, and water supplies continue to be adequate for meeting current needs.

Figure 3. KEY WELL ELEVATIONS DURING THE LAST TEN YEARS



The groundwater elevation at the Key Well on June 30, 2004 was 204 feet, which is slightly above the low end of the Basin's operating range of 200 to 250 feet.

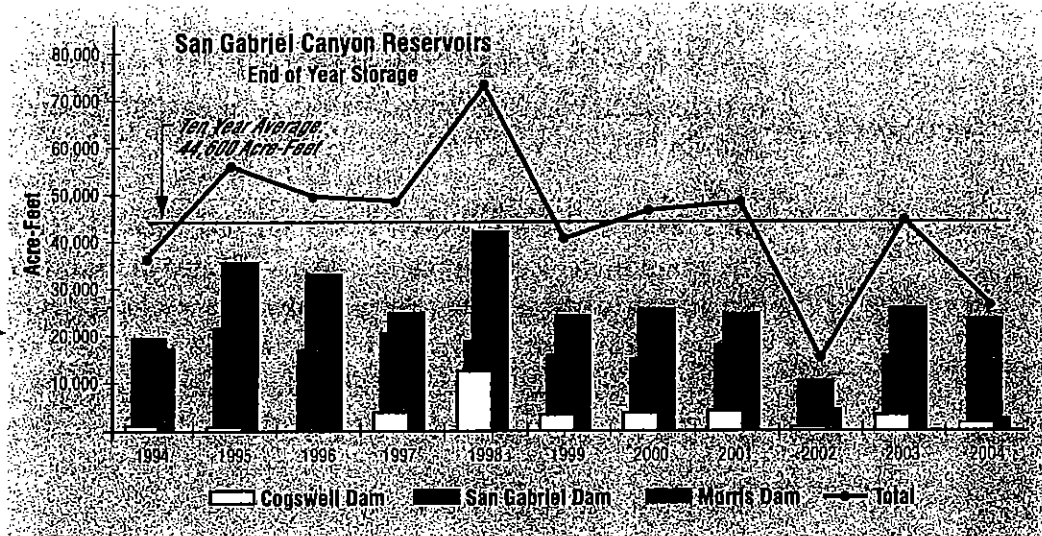
INCREASE IN WATER STORED IN CANYON RESERVOIRS

A significant amount of local surface water can be stored in reservoirs behind Cogswell, San Gabriel, and Morris Dams. At the end of the 2003-04 fiscal year, a total of 27,000 acre-feet of water was stored behind these dams. This is a significant decrease from the previous dry year and represents only 60% of the 10-year average of about 44,600 acre-feet of water in storage at the end of the fiscal year.

Below average water conditions influenced Watermasters's decision to set the Operating Safe Yield at 170,000 acre-feet for 2004-05.

Total water stored in San Gabriel Canyon reservoirs at the end of the fiscal year was 27,000 acre-feet and is 60% of the 10-year average of 44,600 acre-feet.

Figure 4. WATER STORED IN SAN GABRIEL CANYON RESERVOIRS



PROJECTED GROUNDWATER DEMANDS

PRODUCER ESTIMATES

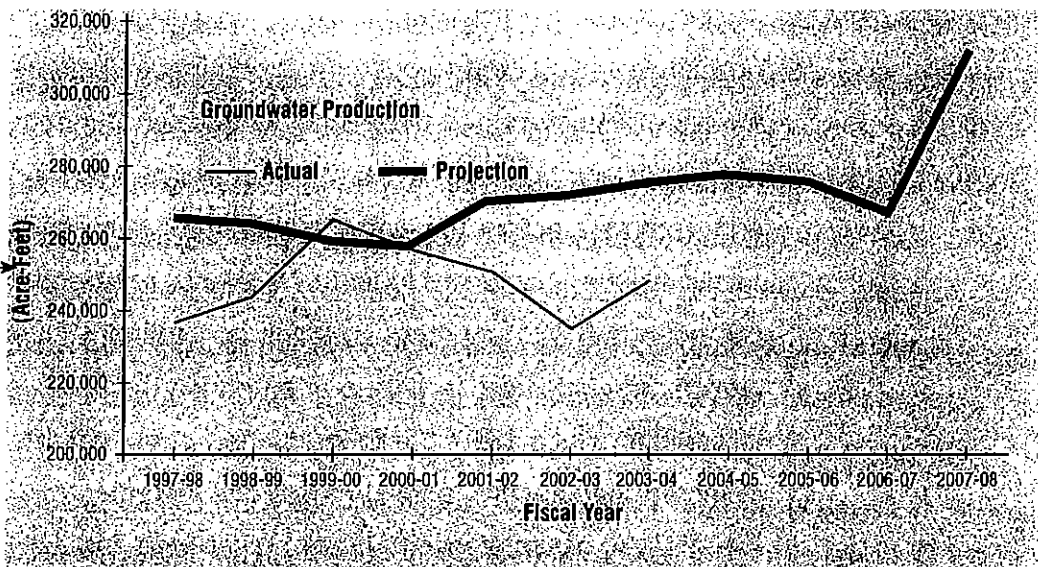
Section 28 requires that each Producer submit a report to Watermaster detailing its projected water supply and water production requirements over the following five years. Projections were received from 20 Producers, accounting for about 90% of the groundwater production from the Basin.

For those Producers who did not submit projections, Watermaster provided an estimate based on the assumption that each Producer had an aggregate projected growth rate that was the same as those Producers who did submit projections. Projected groundwater production is shown in Appendix A.

Figure 5 shows the total projected and historical groundwater production from the Basin since 1997-98.

Water production has decreased, due mainly to the spread of groundwater contamination.

Figure 5. PROJECTED AND HISTORICAL WATER PRODUCTION



Total actual groundwater production for the 2003-04 fiscal year from the Basin was 249,000 acre-feet, which is higher than the previous year's production of 236,000 acre-feet.

Groundwater production is influenced by a variety of conditions, including population, seasonal precipitation, groundwater contamination, and availability of surface water. Excluding the impacts of seasonal precipitation, groundwater production had been experiencing a gradual increase. However, the spread of groundwater contamination in recent years has caused several water agencies to reduce groundwater production and temporarily increase reliance on treated imported water.

OTHER EXTRACTIONS

In addition to pumping by Producers, groundwater will be extracted at the U.S. Environmental Protection Agency's Operable Units. An Operable Unit is a term used to describe a portion of a large Superfund cleanup site. There are six active Operable Units in the San Gabriel Valley: Area 3, Baldwin Park, Puente Valley, El Monte, South El Monte, and Whittier Narrows. While the USEPA is principally concerned that the contamination be cleaned up, Watermaster insists that there not only be an effective cleanup, but that water supply needs also be met in the affected areas.

CURRENT WATER QUALITY CONDITIONS

Groundwater delivered to customers continues to be of high quality and always meets state and federal drinking water standards. However, a number of contaminants in areas of the Basin require careful monitoring and treatment before the water is served for domestic use. These contaminants include a variety of industrial solvents referred to as volatile organic compounds (VOCs). Another common contaminant found in the Basin is nitrate, primarily from fertilizers used during the Valley's agricultural period. In addition, since 1997 the following new contaminants have also been detected: perchlorate, a solid rocket fuel ingredient; MTBE, a gasoline additive; NDMA, associated with liquid rocket fuel; and 1,4-dioxane, a stabilizer for chlorinated solvents.

In response to the detection of these contaminants, Watermaster and local water entities aggressively pursued construction of treatment facilities to control contaminant migration and continue providing high quality water to consumers. This policy of remediation and reuse both preserves a valuable resource and reduces the overall cost of groundwater cleanup. Initially, a number of VOC treatment facilities were constructed, while excessive nitrate concentrations were blended down to acceptable levels. Since the detection of perchlorate and NDMA, Watermaster has been instrumental in the successful implementation of treatment facilities to treat VOCs, perchlorate, and NDMA, with additional facilities operational within the next 6 to 12 months.

While only present in limited parts of the Basin, these chemicals pose difficult challenges to water Producers. Watermaster has responded vigorously by working closely with the local water community to sponsor research, as well as to design, fund, and construct cleanup projects ahead of the USEPA and the firms named as responsible for the contamination. More recently, Watermaster also led negotiations that resulted in the BPOU Project Agreement, including an initial reimbursement for groundwater cleanup costs from certain parties responsible for the contamination. Under the BPOU Project Agreement, Watermaster is responsible for overall project coordination and administration, groundwater monitoring, and compliance with USEPA reporting requirements. Watermaster also participates in decisions regarding technology selection, construction, and operations. Once the treatment facilities are operational, Watermaster will also monitor the project's performance in containing and removing contamination.

PRIMARY CONTAMINANTS IN THE GROUNDWATER BASIN

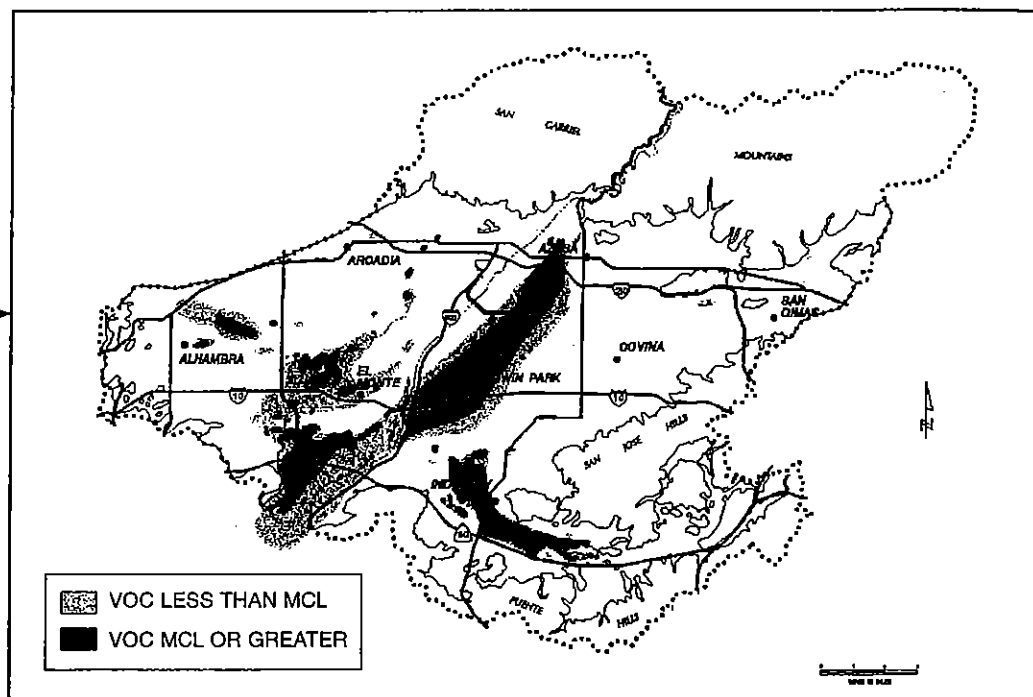
VOLATILE ORGANIC COMPOUNDS AND NITRATES

VOCs and nitrates are the most prevalent contaminants found in the Basin. Intensive monitoring and research concerning these two types of contaminants have been underway for many years. The location and cleanup methods for VOCs are generally well understood; during fiscal year 2003-04, 22 plants treated about 18 billion gallons of VOC-contaminated water. Water contaminated with nitrates above the Maximum Contaminant Level (MCL) is either blended with other sources or not used.

Note in Figure 6 that although VOC contamination is substantial, it is centered in a few areas, leaving a good portion of the Basin unaffected. The same is true for nitrates, which have the highest concentrations in the eastern portion of the Basin, away from the most productive pumping areas (see Figure 7).

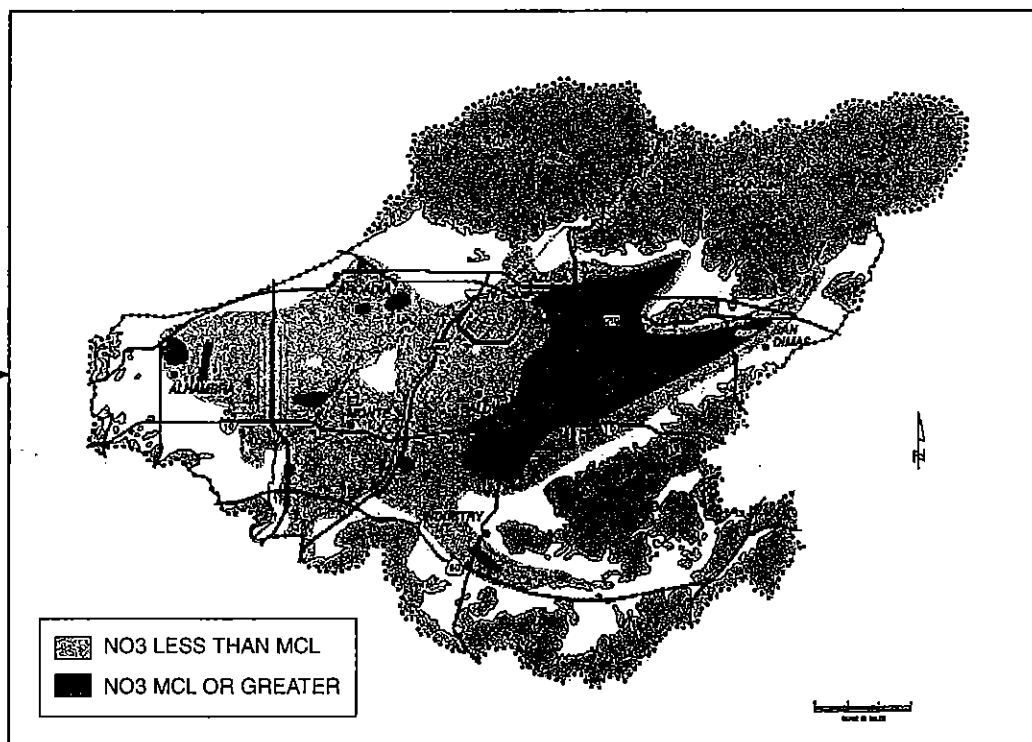
Extensive cleanup programs are underway in the areas affected by VOC contamination. Because the main plumes of contamination are centered in just a few areas, much of the Basin remains unaffected.

Figure 6. VOLATILE ORGANIC COMPOUND LEVELS IN GROUNDWATER



Nitrate (NO_3) contamination is focused in the eastern portion of the Basin, away from the San Gabriel River, the area of most intensive groundwater pumping.

Figure 7. NITRATE LEVELS IN GROUNDWATER



MTBE

In 1996-97, MTBE, a gasoline additive, was discovered in ground and surface water in many areas of the state. The State Department of Health Services (DHS) subsequently established an MCL of 13 parts per billion. Watermaster conducted Basinwide testing for the contaminant and only two drinking water wells had confirmed detectable levels, and those were below the MCL. However, the Regional Water Quality Control Board (Regional Board) has found MTBE in soil close to the surface near leaking underground storage tanks. Watermaster is working closely with the Regional Board to monitor these sites, which could pose a threat to the much deeper drinking water wells. Watermaster continues to collect MTBE samples on an annual basis and has found no detectable levels at any additional wells.

PERCHLORATE

In January 2002, DHS lowered the Action Level (AL) for Perchlorate from 18 to 4 parts per billion and a total of 22 wells were removed from service due to unacceptable levels of perchlorate. DHS subsequently raised the AL to 6 parts per billion in March 2004. Watermaster played a key role in development of the first treatment technology to remove perchlorate from drinking water; this technology is now operational at the La Puente Valley County Water District (LPVCWD) facility, is undergoing regulatory testing at another site and is being prepared for testing at one other location in the BPOU area. Perchlorate treatment facilities have been constructed and are being planned in other areas of the Basin, as well.

NDMA

During 1998 eight local wells were found to contain levels of NDMA above the AL at that time of 2 parts per trillion. Five of the wells with measurable levels of NDMA had already been taken out of service for other reasons, and the other three were put on inactive status once NDMA was detected. DHS subsequently raised the AL to 10 parts per trillion. Similar to Perchlorate, Watermaster is playing a key role with the construction of NDMA treatment facilities in the Baldwin Park Operable Unit area of the Basin. Two facilities are operational, two are built and undergoing testing, and one is under design.

The current maximum contaminant level (MCL) for arsenic is 50 parts per billion. However, USEPA has set a revised standard at 10 ppb; water purveyors must comply by 2006.

ARSENIC

Arsenic is a naturally occurring substance that is sometimes found at very low levels in drinking water, primarily groundwater.

Pursuant to the Safe Drinking Water Act, USEPA established a new MCL for arsenic of 10 parts per billion. Water systems must comply with this new MCL by 2006. The current MCL is 50 parts per billion.

In order to ensure that the proposed new rule would be based on sound science, Watermaster helped fund a national study to determine the threshold at which arsenic causes adverse health effects. Watermaster also conducted low-level arsenic testing Basinwide to determine the impact of a new, more-stringent standard.

According to the Surgeon General, there is a significant health risk from radon in the air. The health risk from radon in drinking water, however, is considered very small.

RADON

Radon is a colorless, odorless, naturally occurring gas found in soil, air, and some groundwater. It can be found throughout the world, both outdoors and in the indoor air of homes. It originates from soil, natural gas, building materials, and sometimes from domestic water. Most of the radon found in indoor air comes from soil below the foundation of a home. According to the Surgeon General, there is a significant health risk from radon in the air. The health risk from radon in drinking water, however, is considered very small.

The USEPA is proposing new requirements on radon found in water. As proposed, the rule offers states and water agencies two alternatives: (1) a very low maximum contaminant level of 300 picoCuries per liter for radon in drinking water, or (2) an alternative standard of 4,000 pCi/l if the state or a local water supplier implements an effective program to reduce overall exposure to indoor radon.

CHROMIUM

Chromium is an inorganic chemical that commonly occurs naturally in groundwater and can also enter drinking water sources through discharges from industries and leachate from hazardous waste sites.

There are two forms of chromium that may be present in drinking water: chromium III (trivalent chromium) and chromium VI (hexavalent chromium). There are uncertainties about the ratio of the occurrence of the two types in drinking water sources. Chromium III is an essential nutrient at trace concentrations. Chromium VI is associated with health concerns, and its toxicity is the basis for setting the chromium drinking water standard.

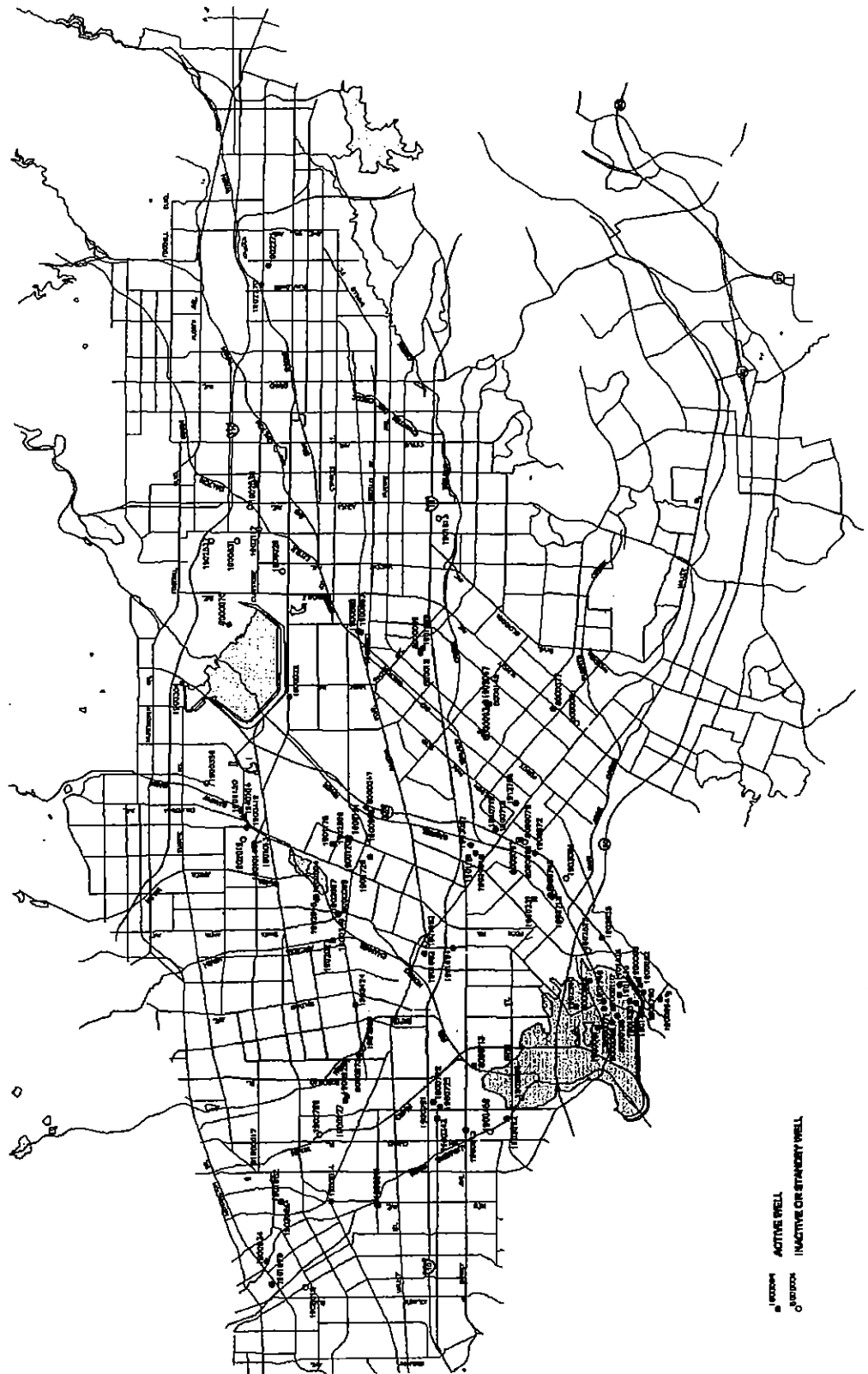
The current MCL for total chromium is 50 parts per billion. In the San Gabriel Valley, at least a portion of total chromium in groundwater leaches out of the soil from naturally occurring deposits. During fiscal year 2000-01, Watermaster collected total chromium and hexavalent chromium samples from all drinking water wells, and all results were below the MCL. The hexavalent chromium results were provided to DHS to assist with its review and possible modification of the existing standard.

WELLS ASSESSED FOR VULNERABILITY TO CONTAMINATION

One of the primary purposes of the Five-Year Plan is to identify wells in the Basin that are vulnerable to contamination. A well is considered vulnerable if the concentration of contaminants reaches 50 percent of the AL or MCL allowed by state drinking water regulations. In order to project which wells may be vulnerable over the next five years, Watermaster reviews water quality tests performed on each well, regional water quality conditions, and contaminant migration patterns. (See figures 8(a), 8(b) and 8(c).)

Watermaster maintains a Water Quality Protection Plan (found in a separate volume) that provides an early warning to inform Producers of potential increases in contaminant levels. The Water Quality Protection Plan also provides suggested alternative sources of supply, and proposes long-term actions to solve the contamination problem(s) without contributing to the migration of contaminants in the Basin.

Figure 8(a). WELLS VULNERABLE TO POTENTIAL VOLATILE ORGANIC COMPOUND CONTAMINATION WITHIN THE NEXT FIVE YEARS



[illegible]

[illegible]

FIVE-YEAR WATER QUALITY AND SUPPLY PLAN

Since 1991, when Watermaster was given water quality management responsibilities by the Court, the focus of attention has been principally on understanding and treating volatile organic compounds (VOC). During the ensuing years, Watermaster, together with many other Basin water agencies, private water companies, and regulators, have worked to develop the expertise, financing, and treatment technologies to effectively undertake Basinwide cleanup of VOCs.

The discovery of perchlorate and NDMA, however, upset the existing VOC cleanup approach by creating a number of challenges. Most important, these new contaminants could not be removed using existing treatment plants, and a number of important VOC treatment plants had to be shut down since the new contaminants were found in areas of existing VOC contamination.

Watermaster encourages groundwater cleanup projects that also meet water supply needs

→ This report outlines a combined cleanup and water supply plan for each of the USEPA Operable Units (Superfund areas). Watermaster's plan for each area is consistent with the USEPA plans, and its goal is to implement cleanup as promptly as possible, with or without the cooperation of the Responsible Parties.

GROUNDWATER MONITORING PROGRAMS

Monitoring involves measuring groundwater levels, groundwater quality, and groundwater flow. Watermaster continuously refines its understanding of the groundwater Basin in order to increase the safe yield of the Basin, and to protect and improve local water quality.

GROUNDWATER ELEVATION MONITORING

CONTINUE KEY WELL AND SUPPLEMENTAL KEY WELL OPERATION AND DATA PROCESSING

The entire 167 square-mile groundwater Basin is managed as one unit based on the groundwater levels as measured at a single Key Well in Baldwin Park. Water levels have been measured at this well since 1903 and are currently measured every three hours by an automated recorder.

Additional groundwater level recorders have been installed near the Santa Fe Spreading Grounds, adjacent to the San Gabriel River above the 210 Freeway, in the City of Rosemead, in the City of Covina and near the Whittier Narrows Dam, and are synchronized with the Key Well. Collectively, these wells are designed to provide a better understanding of the impacts of the recharge operation at the Santa Fe Spreading Grounds on the Basin hydrogeology. Water elevation data are being collected at additional wells, and water level recorders may be installed in those wells over the next five years.

CONTINUE BASINWIDE GROUNDWATER ELEVATION MONITORING PROGRAM (BGWEMP)

The purpose of the BGWEMP is to obtain groundwater level measurements from a large number of wells across the Basin. The information is used to prepare contour maps that show the direction of groundwater flow. The data are then used in the Basin computer model to simulate future groundwater flows. The BGWEMP plan for the coming years includes:

- taking weekly measurements of water levels in nine primary wells;
- gathering semiannual measurements of water levels in 170 primary wells;
- obtaining water levels in secondary wells from well owners or water Producers, the San Gabriel Valley Protective Association, Regional Water Quality Control Board, USEPA, and others;
- updating the database for water level data; and
- preparing semiannual groundwater contour maps of the entire Basin.

GROUNDWATER QUALITY MONITORING

CONTINUE BASINWIDE GROUNDWATER QUALITY MONITORING PROGRAM (BGWQMP)

The goal of the BGWQMP is to sample all production wells in the Basin at least once a year for VOCs and nitrates. The frequency of BGWQMP sampling complements the monitoring requirements under state law and supplements information gathered through Regional Water Quality Control Board source investigations and USEPA remedial investigations. The data collected by BGWQMP are used to plot maps showing the current locations and magnitude of contaminant levels.

CONTINUE TITLE 22 WATER QUALITY TESTING

Watermaster will continue performing state-mandated Title 22 water quality sampling of raw water from approximately 200 active wells in the Basin. Watermaster will also continue tracking regulations and informing local water purveyors when they need to take action on specific issues. Information from centralized water quality testing is added to Watermaster's water quality database, which contains data from many sources. The centralized testing enables Watermaster to spot trends that might otherwise go unnoticed and also lowers monitoring costs to Producers.

GROUNDWATER FLOW AND CONTAMINANT MIGRATION STUDIES

Groundwater level and quality data are entered into the Basin computer model, which simulates where contamination is projected to flow in the future. The goal is to project contaminant levels by areas in advance of the actual event, and identify remedial steps to be taken.

GROUNDWATER ELEVATION SIMULATIONS SHOW FUTURE PUMPING WILL NOT SIGNIFICANTLY CHANGE GROUNDWATER MOVEMENT

To determine the direction of groundwater flow through the Basin, Watermaster compiled the daily average 2003-04 production for each well, entered the data into the groundwater model, and simulated how production impacted water levels throughout the Basin. A simulation was then run using estimates for 2008-09. These simulations show that the estimated increase in groundwater production during the next five years will not significantly change the overall direction of Basin groundwater movement, which continues to flow generally from east to west to a pumping trough in the western portion of the Basin, and also northeast to southwest, exiting

through Whittier Narrows. The simulation for 2008-09 also shows localized pumping depressions in the Baldwin Park area, which are projected to be created by continuous groundwater pumping from extraction wells associated with the BPOU contaminant cleanup project. Contaminated groundwater from those wells will be treated at centralized treatment facilities and the DHS-permitted water will be provided for potable use.

SIMULATE IMPACTS OF GROUNDWATER PUMPING ON CONTAMINANT MIGRATIONS

Simulations similar to the ones described above were used to make the finding that pumping has no major adverse impacts on contaminant migration.

Actual groundwater quality data from 2003-04 and projected quality data from 2008-09 were entered into the groundwater model for the contamination migration studies. The computer model then simulated how the flow of water would affect the migration of contamination. The simulation showed that changes in groundwater flow did not have major impacts on the migration of contaminants. (Refer to Figures 9 and 10.)

GROUNDWATER CLEANUP PROJECTS

Watermaster coordinates and provides technical assistance on many cleanup projects in the Basin, but does not own or operate any cleanup facilities. Watermaster's involvement includes coordinating proposed USEPA cleanup programs with in-Basin water demands and providing assurance that projects are consistent with the Judgment.

REVIEW OF SECTION 28 APPLICATIONS

Section 28 of Watermaster's Rules and Regulations requires that Watermaster review every proposal to construct, destroy, or modify a well or build a treatment plant. This regulation is required to ensure that any new or increased extractions from the Basin, or any changes in production patterns, are consistent with contamination cleanup efforts and will not adversely affect Basin water quality.

**Figure 9. SIMULATED 2003-04
BASIN GROUNDWATER CONTOURS**

Simulations of the direction of groundwater flow in 2003-04 and projections for 2008-09 (on the following page) show that the estimated increase in groundwater pumping during this period does not significantly change the overall direction of Basin groundwater movement.

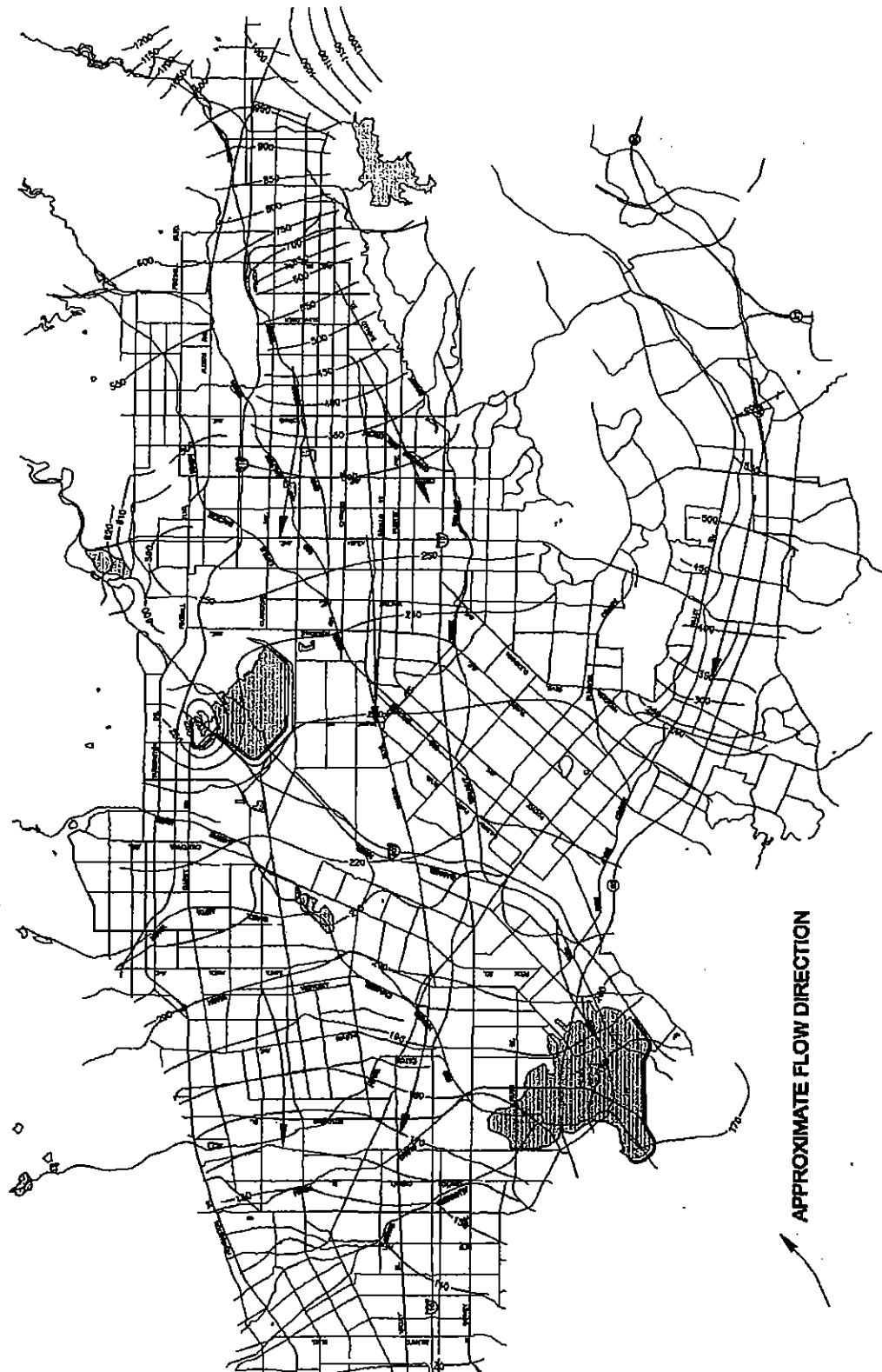
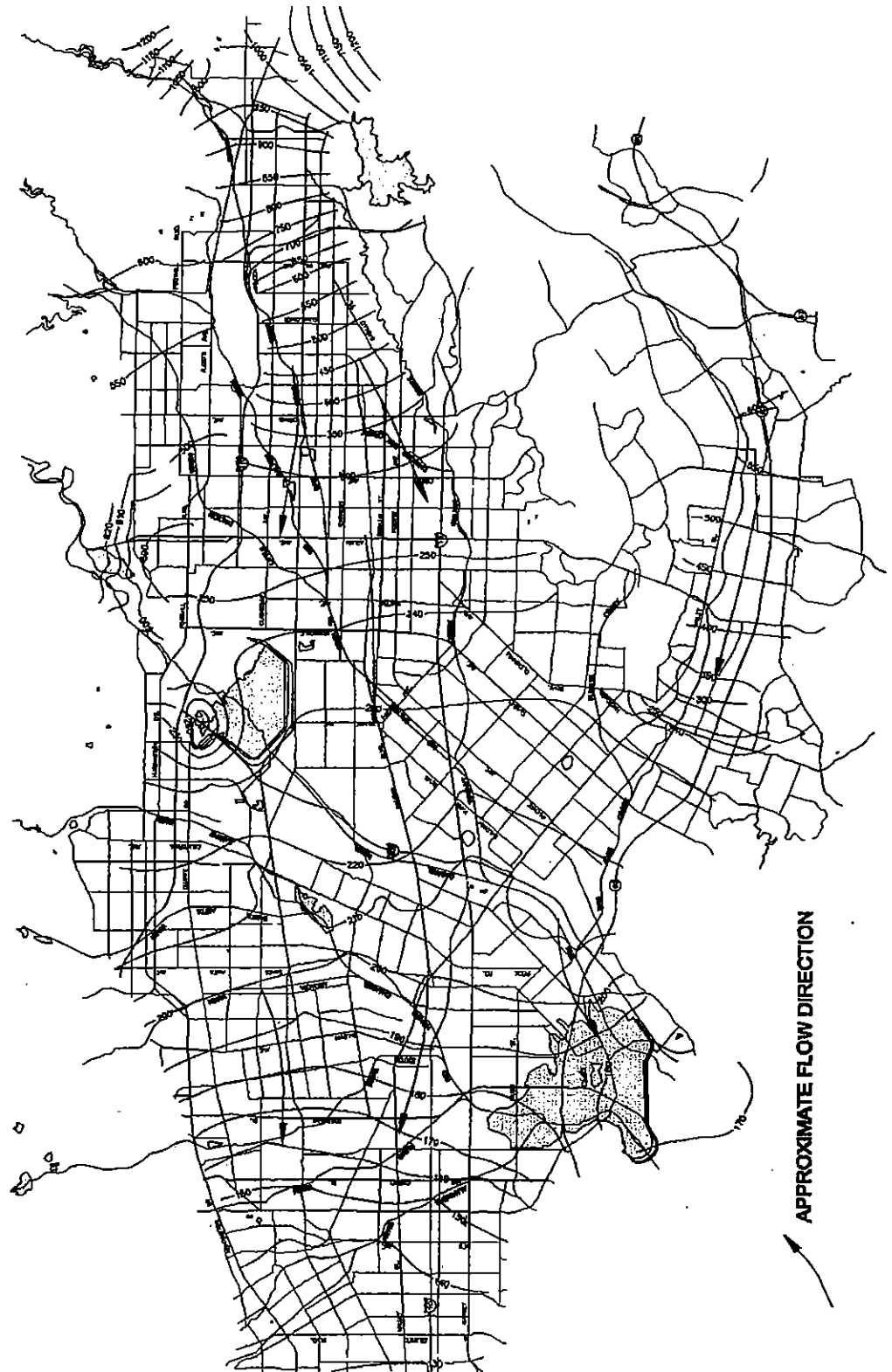


Figure 10. SIMULATED 2008-09
BASIN GROUNDWATER CONTOURS



WATERMASTER CLEANUP PROJECTS/USEPA OPERABLE UNIT PLANS

With USEPA plans generally in place, it is now possible for Watermaster to develop solutions that will provide effective cleanup, meet local water supply needs, and conform to the USEPA plans.

The USEPA established Operable Units for the various areas within the Basin that have been contaminated and require groundwater cleanup. The Operable Units are Area 3, Baldwin Park, Puente Valley, El Monte, South El Monte, and Whittier Narrows (See Figure 11). USEPA has established a methodical process that includes a review of the extent of contamination (Remedial Investigation), development of alternative cleanup plans (Feasibility Study) and selection of the most appropriate cleanup plan (Proposed Plan). Following these activities, the USEPA issues a report identifying the agreed upon Cleanup Plan (Record of Decision). Subsequently, the project facilities are designed and constructed.

The USEPA has made progress by identifying cleanup plans for nearly all the Operable Units. Unlike the USEPA, Watermaster is not only concerned with cleaning up the Basin, but also wants to meet the water supply needs of the region. With USEPA plans generally in place, Watermaster is working to develop solutions that not only provide effective cleanup and conform to the USEPA plans, but also meet local water supply needs.

This Five-Year Plan describes each of the Operable Units along with the proposed cleanup plan of the USEPA. In addition, the Plan describes the current and projected impacts on water supply caused by the contamination and the cleanup.

Watermaster intends to work with affected Producers and other local water agencies to implement cleanup of each Operable Unit as quickly as possible, with or without the cooperation of the Responsible Parties. Watermaster will continue to seek cost recovery from the Responsible Parties for any cleanup costs it incurs.

BALDWIN PARK OPERABLE UNIT

The Baldwin Park Operable Unit (BPOU) is a seven-mile-long, one-mile-wide area of groundwater contamination that lies east of the San Gabriel River, beginning north of the I-210 freeway in Azusa to below the I-10 freeway in Baldwin Park (see Figure 12). The contamination has primarily resulted from improper use and disposal of chemicals in the Azusa area. The contamination continues to spread generally in a southwesterly direction.

The USEPA originally issued its Record of Decision (ROD), or cleanup plan, for the Baldwin Park Operable Unit several years ago. The ROD calls for pumping and treating groundwater in the northern area, where contaminant concentrations are highest, and also in the southern area to limit further migration of contaminants. The ROD involves pumping and treating about 6,000 gallons per minute in the northern areas and 16,000 gallons per minute in the southern area. The ROD also recommends the use of existing water supply wells, treatment systems, and pipelines, when feasible. Importantly, the plan encourages adding the treated water to the potable supply, rather than simply recharging it back into the ground or disposing of it to storm drains.

Figure 11. LOCATION MAP OF USEPA OPERABLE UNITS

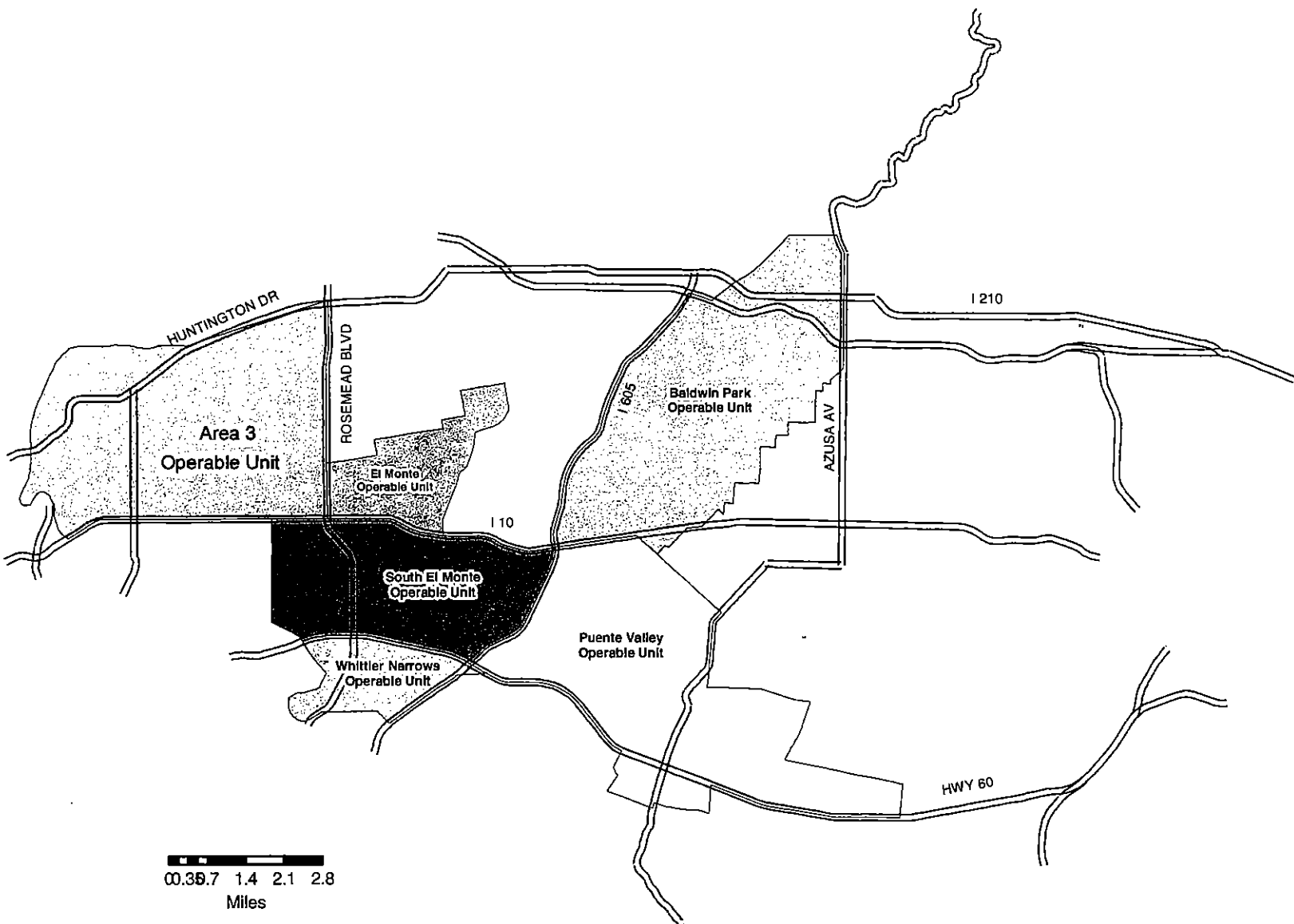


Figure 12. LOCATION MAP OF BPOU PROJECTS

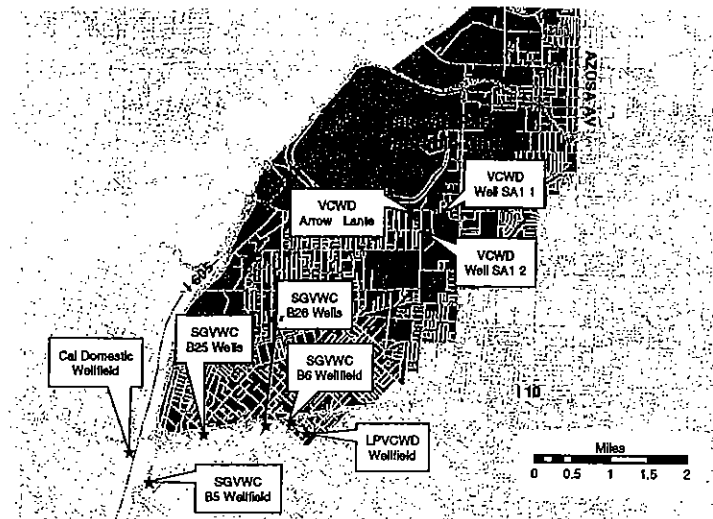


Figure 13. LOCATION MAP OF SEMOU PROJECTS

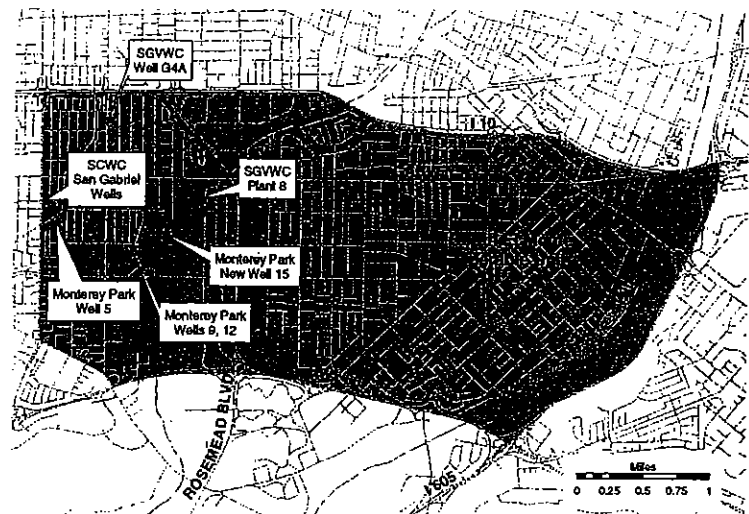


Figure 14. LOCATION MAP OF EMOU PROJECTS

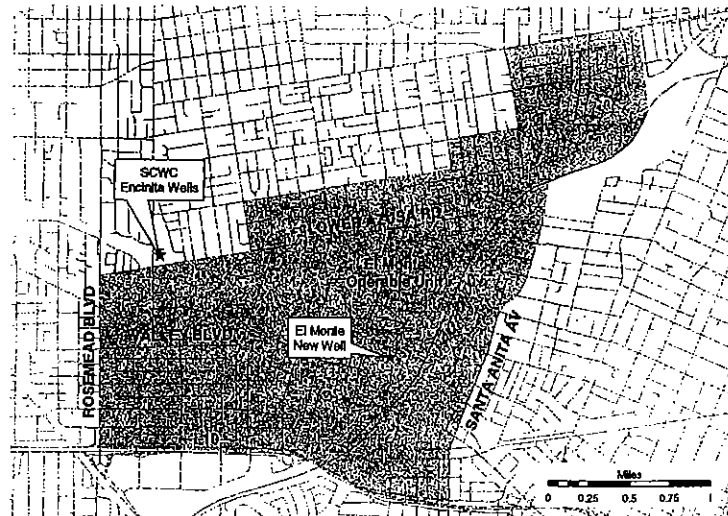


Figure 15. LOCATION MAP OF PVOU PROJECTS

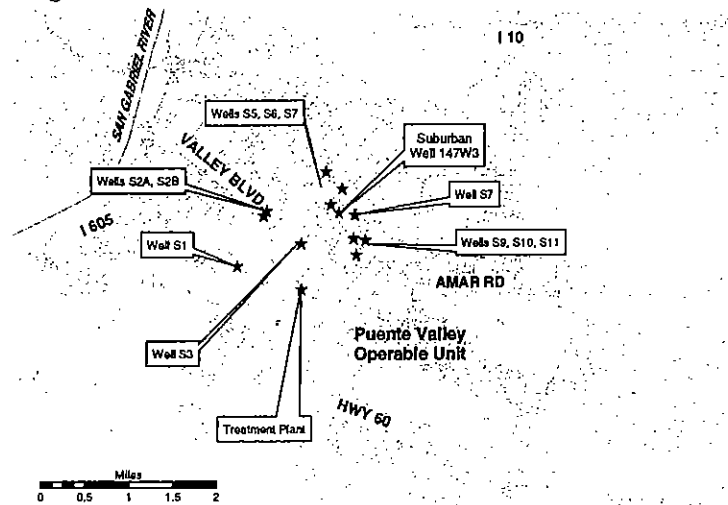


Figure 16. LOCATION MAP OF WNOU PROJECTS

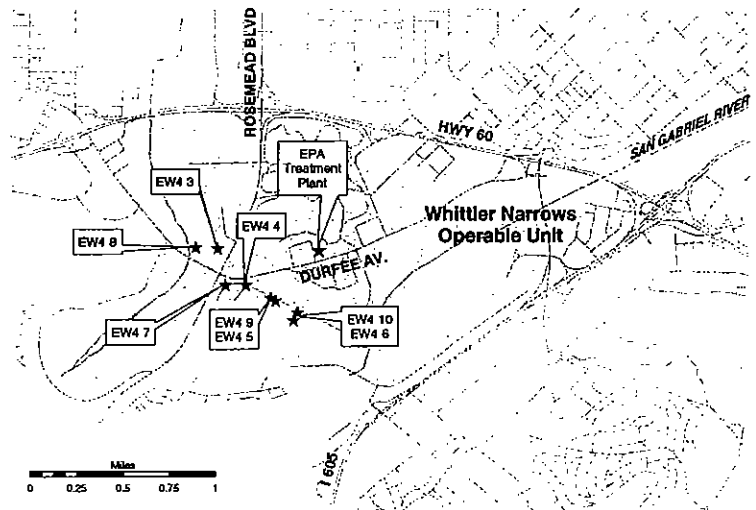
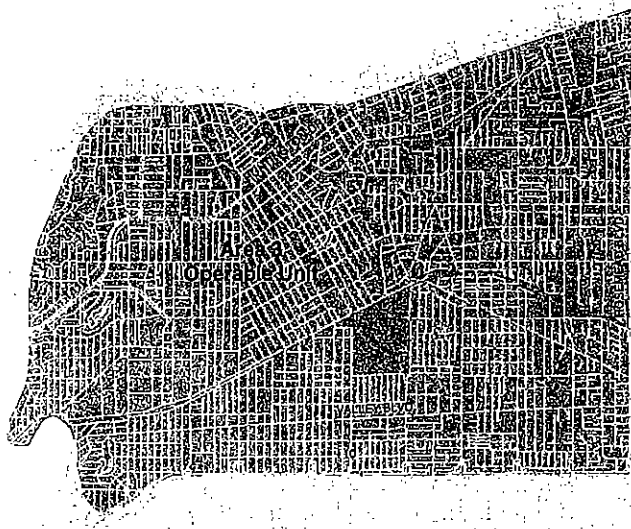


Figure 17. LOCATION MAP OF AREA 3 PROJECTS



Within the last few years, the discovery of the new contaminants perchlorate and NDMA has resulted in the shutdown of numerous treatment facilities that were designed by local water agencies to remove volatile organic compounds but not the new contaminants. Shutting down the treatment plants has allowed the contaminants to migrate southward into previously unaffected areas, in turn forcing the shutdown of other water supply wells.

In 2002, after several years of negotiation led by Watermaster, eight of the BPOU Responsible Parties (called Cooperating Respondents, or CRs) and seven water entities signed the BPOU Project Agreement. Under this landmark agreement, the CRs pay the cost to construct and operate the USEPA-required BPOU cleanup facilities for 15 years. Several water purveyors will own and operate the facilities as required by USEPA and will use the highly treated water in their water systems. The San Gabriel Basin Water Quality Authority (WQA) has obtained outside funds to help construct necessary treatment facilities, extraction wells and pipelines. Watermaster is providing project management and project coordination services.

Watermaster will continue to coordinate BPOU cleanup activities among the various parties over the next 13 years, including interfacing with USEPA, overseeing agreements between water purveyors to use the treated water, and providing accounting services to track Project costs and funds received. Following permitted operation of the BPOU Project facilities, Watermaster will coordinate collection of field data, such as water production, water quality and water levels, and will provide Project performance reports to USEPA.

The BPOU Project consists of four centralized treatment facilities with a combined extraction and treatment capacity of 25,900 gpm. Those treatment facilities are located at Valley County Water District's (VCWD) Lante Well site (7,800 gpm), San Gabriel Valley Water Company's (SGVWC) Plant B6 (7,800 gpm) and Plant B5 (7,800 gpm), and La Puente Valley County Water District's (LPVCWD) well site (2,500 gpm).

In the northerly portion of the BPOU, the VCWD Project consists of three extraction wells, including two new wells, pumping up to 7,800 gpm (average annual rate of 7,000 gpm) to a centralized treatment facility at the VCWD Lante Well site. The VCWD Project includes new raw water pipelines from Wells SA1-1 and SA1-2 to the treatment plant, which consists of separate facilities to treat VOCs, perchlorate, NDMA, and 1,4-dioxane. In addition, a treated water pipeline will provide at least 5,500 gpm of fully treated water to Suburban Water Systems to offset production lost from some of its wells; VCWD will use the remaining 1,500 gpm. The VCWD Project is anticipated to be operational by 2005. The location of the VCWD Project is shown on Figure 12.

In the southerly portion of the BPOU are three treatment projects—the LPVCWD treatment facility (2,500 gpm), SGVWC B6 Project (7,800 gpm), and SGVWC B5 Project (7,800 gpm). The location of these treatment facilities is shown on Figure 12.

The LPVCWD project is permitted by DHS and has been operational since March 2001. Treated water in excess of LPVCWD's needs is provided to Suburban Water Systems (SWS) to enable the treatment facility to be operated on a continuous basis.

The SGVWC B6 project, now operational and awaiting a DHS permit, consists of four new extraction wells and a centralized treatment facility that will treat up to 7,800 gpm (average annual rate of 7,000 gpm). The treatment facility will treat the contaminated groundwater for VOCs, perchlorate, NDMA, and 1,4-dioxane. Once the DHS permit is received in early 2005, the treated water will be provided to SGVWC customers.

The SGVWC B5 Project consists of one new extraction well along with two existing wells that will provide up to 7,800 gpm (average annual rate of 7,000 gpm) to a centralized treatment facility located at the SGVWC B5 site. The treatment facility will treat the contaminated water for VOCs, perchlorate, NDMA, and 1,4-dioxane. Following receipt of a permit from DHS, the treated water will be provided to City of Industry customers (1,200 gpm) and the balance provided to SGVWC customers. The SGVWC B5 Project is anticipated to be operational by spring 2006.

FIVE-YEAR BPOU WATER SUPPLY/CLEANUP PLAN

PROJECT	DESCRIPTION	VULNERABLE WELLS TARGETED	STATUS	EPA BPOU ROD	WATERMASTER ROLE DURING NEXT FIVE YEARS
1. LPVCWD	2,500 gpm Treatment Facility	LPVCWD Wells 2, 3, & 4 Potentially SWS 140W-3, 4 & 5	Complete 2000	Yes	Coordinate funding, data collection, performance reports for 2005-09
2. SGVWC	7,800 gpm Treatment Facility Plant B6	SGVWC B6C, B6D, B25A, B25B, B26A, B26B Potentially SGVWC B4B/B4C	To be completed 2004-05	Yes	Coordinate design, construction, permitting 2004-05. Coordinate funding, data collection, performance reports 2005-09
3. SGVWC	7,800 gpm Treatment Facility Plant B5	SGVWC B5A, B5B, B5E Potentially Industry 3, 4, & 5 Potentially Cal Domestic 2, 3, 5A, 6, 8 & 14	To be completed 2005-06	Yes	Coordinate design, construction, permitting 2004-06. Coordinate funding, data collection, performance reports 2006-09
4. VCWD	7,800 gpm Treatment Facility Lante	VCWD Arrow, Lante Maine East, Maine West Potentially SWS 139W-2, 4, 5 & 6	To be completed 2004-05	Yes	Coordinate design, construction, permitting 2004-05. Coordinate funding, data collection, performance reports 2005-09

The projects will ensure that there is an adequate water supply for the Baldwin Park Operable Unit area. These projects are consistent with the USEPA ROD, meet contaminant removal and containment requirements, and meet local water supply needs.

In addition to the USEPA-required BPOU facilities, several water purveyors have had to build treatment facilities at other wells within the BPOU area in order to meet water supply needs until the USEPA remedy prevents the continued spread of contamination. These additional facilities are shown below.

WELL OWNER TREATMENT PROJECTS IN THE BALDWIN PARK OPERABLE UNIT

OWNER	PROJECT	STATUS
1. California Domestic Water Company	Treatment Facility for Wells 3, 5A, 6 & 14	Complete 2002
2. Suburban Water Systems	Treatment/blending projects for Well 140W-5	Complete 2003-04
3. Valley County Water District	Treatment Facilities for East Maine/West Maine Wells and East Nixon/West Nixon	Complete 2003-04

SOUTH EL MONTE OPERABLE UNIT

The South El Monte Operable Unit (SEMOU) covers approximately eight square miles in the south-central portion of the Basin. It is bounded by the I-10 Freeway, the 60 Freeway, the I-605 Freeway, and San Gabriel Boulevard. (See Figure 13). A ROD for the SEMOU was issued in 2000. In support of cleanup efforts, select Responsible Parties are currently working with impacted water purveyors and WQA in an effort to fund necessary water supply/cleanup projects. Watermaster continues to support these efforts.

The City of Monterey Park (Monterey Park) Wells No. 5 (1,900 gpm) and 9, 12, and 15 (4,500 gpm) were to be treated for VOCs only. During calendar years 2000 and 2001 when the treatment facilities for these wells were under design, perchlorate had been found above the detection level of 4 ppb, but below the Action Level at that time of 18 ppb. With implementation of the revised DHS Action Level of 4 ppb during January 2002, the existing permitted treatment facilities located at the site of Monterey Park Wells No. 5 and 12 were rendered inoperative. During March 2004 the perchlorate AL was raised to 6 ppb.

Monterey Park is working with DHS on a plan to treat both VOCs and perchlorate at its Well No. 5. That plan includes use of the existing liquid-phase granular activated carbon (LGAC) vessels and may be permitted during the winter of 2005. Monterey Park also has added a new perchlorate treatment system for its Wells No. 9, 12 and 15 that uses a disposable resin, as a supplement to the existing VOC treatment facility. This facility also employs LGAC vessels following the VOC and perchlorate treatment facilities. The modified 4,500 gallons per minute (gpm) treatment facility may be permitted by DHS during fall 2004.

The SGVWC Plant 8 VOC Treatment Facility has a capacity of 5,000 gpm and has been in operation since fiscal year 2001-02. No new compounds were detected during fiscal year 2003-04. VOC concentrations have risen in the groundwater. To ensure treatment facility operations are not impacted SGVWC has voluntarily initiated construction of supplemental VOC treatment at its Plant 8.

The Southern California Water Company (SCWC) VOC treatment facility at San Gabriel Wells No. 1 and 2 had been permitted and operating. However, with the establishment of the revised Perchlorate AL in 2002, SCWC voluntarily removed one of the wells from operation. SCWC is now installing a disposable resin system to remove perchlorate from that well. SCWC plans to have the modified treatment facility operational and permitted by DHS during fiscal year 2004-05.

FIVE-YEAR SEMOU WATER SUPPLY/CLEANUP PLAN

PROJECT	DESCRIPTION	STATUS
1. Monterey Park	New Well 15, 1,500 gpm; Wells 9 & 12 Treatment Plant, 4,500 gpm	Treatment Facility Complete in 2001-02. (Well 9 only) Well 12/15 Treatment Plant complete 2004-05
2. Monterey Park	Well 5 Treatment Plant, 1,900 gpm	Existing VOC Treatment Perchlorate treatment 2004-05
3. SGVWC	G4A Well Treatment Facility 775 gpm	To be completed 2004-05
4. SCWC	San Gabriel Wells 1 & 2 Treatment Facility 2,200 gpm	Treatment Facility complete in 2003-04 (SG1 only)
5. SGVWC	Plant 8 Treatment Facility 5,000 gpm	Treatment Facility complete in 2001-02 Additional Treatment Facility 2004-05

While funding negotiations proceed for the entire SEMOU, and USEPA carries out its characterization and enforcement process, water purveyors have proceeded with planned cleanup projects with assistance from WQA.

EL MONTE OPERABLE UNIT

The El Monte Operable Unit (EMOU) covers an area of about 10 square miles in the south-central portion of the Basin. It is bounded by the I-10 Freeway in the south, Rosemead Boulevard in the west, and Santa Anita Avenue and Rio Hondo on the east. The northern boundary generally follows Lower Azusa Road. (See Figure 14). While shallow contamination is found throughout the EMOU, deep (intermediate zone) contamination is found in the northwest and easterly area of the EMOU.

The USEPA's ROD for the EMOU includes numerous small, shallow extraction wells and treatment, along with two areas of deep extraction and treatment. Due to generally poor water quality in the area, the shallow groundwater will not be used for a potable supply. The deep extractions are recommended for potable use by the local water purveyors. The deep zone extraction and treatment in the northwest area is planned to be accomplished by the existing Encinita Well and Treatment Facility owned by Southern California Water Company. Deep zone extraction is also planned for new wells to be constructed at California-American Water Company's (CAWC) Blue Ribbon Wells No. 1 and No. 2 sites. The new extraction wells will pump to new LGAC vessels to remove VOCs.

During July 2002, USEPA issued an Explanation of Significant Differences (ESD), which indicated that perchlorate, NDMA, 1,4-dioxane, and hexavalent chromium had been detected in excess of DHS action levels. In the event water from extraction wells cannot be blended to acceptable levels, additional treatment facilities will need to be installed, significantly increasing cleanup costs. Thus far, extraction and treatment of VOCs at SCWC Encinita Plant has not been impacted.

Watermaster will continue to assist with data collection and permitting of facilities over the next five years.

The Five-Year Water Supply/Cleanup Plan for the EMOU is presented on the following table.

FIVE-YEAR EMOU WATER SUPPLY/CLEANUP PLAN

PROJECT	DESCRIPTION	STATUS
1. SCWC	Encinita Well and Treatment Facility 1,200 gpm	Project complete
2. CAWC	News Wells and Treatment Facility	Project negotiation 2004-05

PUEENTE VALLEY OPERABLE UNIT

The Puente Valley Operable Unit (PVOU) lies in the southeastern portion of the Basin, essentially bounded by the 60 Freeway in the south, Azusa Avenue in the east, and the I-10 Freeway in the north. (See Figure 15.) The PVOU encompasses the Puente Valley, which is tributary to the southeasterly portion of the Basin. Contamination in the PVOU includes various VOCs. All aquifers within the PVOU (shallow, intermediate, and deep) are considered sources for municipal water supplies.

The USEPA has issued a ROD for the PVOU. The plan identified in the ROD includes extraction and treatment of groundwater within the shallow and intermediate zones from wells located in the center of the PVOU. The proposed location of shallow zone extraction wells is shown on Figure 15. Watermaster is currently working with local water entities to develop a plan to use water from the PVOU treatment facility for potable purposes. Watermaster and local water entities have proposed constructing additional treatment to remove low levels of perchlorate and providing the treated water to a local purveyor for potable use. The proposed USEPA project would discharge the treated water into a nearby channel for groundwater recharge.

The following table presents the Five-Year Water Supply/Cleanup Plan for the PVOU.

FIVE-YEAR PVOU WATER SUPPLY/CLEANUP PLAN

PROJECT	DESCRIPTION	VULNERABLE WELLS TARGETED	STATUS
SWS	Shallow Zone Treatment Facility	SWS Well 147W-3	To be completed 2004-05 Negotiation with Responsible Parties 2004-05

WHITTIER NARROWS OPERABLE UNIT

The Whittier Narrows Operable Unit (WNOU) is located in the south-central portion of the Basin. Most of the surface and groundwater flow out of the Basin travels through the WNOU, located roughly between the Narrows and the 60 Freeway, with foothills on the west and east boundaries. (See Figure 16). The WNOU has shown low to moderate levels of VOCs, with concentrations increasing in recent years. Contaminants that migrate through the WNOU will enter the Central Basin aquifer.

The USEPA has declared that the WNOU is a “fund-lead” project, meaning that the USEPA (with the state) will fund the design, construction, and operation of the remedy and will seek cost recovery from responsible parties later. The USEPA cleanup plan involves a series of shallow and intermediate zone extraction wells with treatment. The total extractions are estimated to be about 11,000 gallons per minute (5,000 gpm shallow and 6,000 gpm intermediate). All treated water is intended for potable use, although a small amount may be used for irrigation near the Narrows.

USEPA conducted startup testing of the WNOU treatment facility between February and June 2002. During that time USEPA and Watermaster negotiated a Water Production Agreement enabling USEPA to proceed with WNOU groundwater cleanup without adversely impacting Basin groundwater storage. During June 2002 USEPA began treating the full 11,000 gpm at the WNOU treatment facility. During fiscal year 2002-03 USEPA continued full operation of the treatment facility. During that time NDMA was detected in some of the shallow extraction wells, prolonging the testing and review process for the shallow zone water through June 2006. The City of Whittier has obtained a DHS permit to use the 6,000 gpm of treated intermediate zone water for municipal use instead of producing water from its existing wells. The City is negotiating with USEPA concerning the operation of the treatment facility.

USEPA intends to pursue a permit from DHS for potable use of shallow zone water over the next two years. The Water Production Agreement originally set to expire in May 2004 has been extended to accommodate that schedule. The following table presents the Five-Year Water Supply/Cleanup Plan for the WNOU.

FIVE-YEAR WNOU WATER SUPPLY/CLEANUP PLAN

PROJECT	DESCRIPTION	VULNERABLE WELLS TARGETED	STATUS	WATERMASTER ROLE
1. Shallow Extraction Project	EPA Wells, Pipe Treatment Facilities 5,000 gpm	Whittier 13, 15, 16, 17 & 18 Los Angeles County	Complete 2002. Potable operations 2006-07	Monitor groundwater production, assist with data collection 2005-09
2. Intermediate Extraction Project	EPA Wells, Pipe Treatment Facilities 6,000 gpm	SWS 201W-2, 4, 5 & 6 Whittier 13, 15, 16, 17 & 18	Complete 2002. Potable operations 2004-05	Monitor groundwater production, assist with data collection 2005-09

AREA 3 OPERABLE UNIT

The Area 3 Operable Unit is located in the westerly portion of the Basin. It is generally bounded on the south by the 10 Freeway, on the east by Rosemead Boulevard, on the North by Huntington Drive and on the west by the boundary of the Main Basin (see figure 17). USEPA has installed five monitoring wells to collect water quality data to supplement data collected from water supply wells. USEPA has initiated a Remedial Investigation and Feasibility Study to identify the extent of the contamination and to evaluate appropriate cleanup remedies.

PRODUCERS' WATER SUPPLY PLANS

Watermaster's Water Quality Protection Plan provides early warning to Producers in the event that wells are found to exceed drinking water quality standards. The Plan also contains pre-analyzed suggestions to the Producers for responding to the presence of contaminants.

Watermaster will continue providing the following services to assist Producers in meeting water demand

WATER SUPPLY PLANS TO MEET PROJECTED DEMANDS

Water Producers propose to construct 15 new wells, build 7 treatment plants, and reactivate three wells during the next five years. Watermaster will continue providing the following services to assist Producers in meeting water demand:

- investigate all new or increased water extractions;
- provide computer modeling and technical support on treatment issues concerning the impact of extractions on contaminant migration;
- prioritize areas requiring further investigation, and coordinate with Producers on water supply modifications; and
- direct changes in pumping or treatment as necessary.

CONDUCT STUDIES, MONITORING AND INVESTIGATIONS

The Main San Gabriel Groundwater Basin is very complex, covering 167 square miles and holding about 2.8 trillion gallons of water. Water enters the Basin from countless natural and man-made locations, and is extracted from over 200 wells operated by dozens of independent Producers. Watermaster conducts special studies to identify projected water demands and to increase understanding of the Basin, so that it can be managed in a way that preserves and improves its water supply and quality.

LANDFILL INSPECTIONS

Watermaster continues conducting on-site inspections of area landfills to ensure they are operated in a way that does not allow contaminants to seep into the groundwater.

IDENTIFY AND REDUCE POTENTIAL SOURCES OF CONTAMINATION

COOPERATE WITH THE REGIONAL WATER QUALITY CONTROL BOARD

Since 1993, Watermaster has obtained information from the Regional Water Quality Control Board (RWQCB) about sources of VOC contamination in the Basin that is collected as part of the RWQCB investigations of potential contaminated sites. The information includes a description of all potential sources of contamination investigated by the RWQCB, including:

- maps showing the location of all investigation sites;
- available cause-and-effect relationships between pollution sources and contaminated wells; and
- plans and tentative schedules to abate the source of pollution and to clean up the soil and water.

This information is used in Watermaster's Section 28 process to help evaluate changes in pumping practices in relation to known contamination sources.

Watermaster has reviewed a large amount of information gathered in RWQCB files and entered it into a database. Currently the information is being used to identify locations with shallow levels of MTBE contamination to determine if the contamination could spread into drinking water wells. Watermaster was able to identify potentially vulnerable wells, notify affected purveyors, and develop preventive measures.

AQUIFER PERFORMANCE TESTS

Watermaster has developed a groundwater flow model for the entire Basin that assists in evaluating the potential impacts of changes in groundwater production.

Although Watermaster completed its three-year Aquifer Performance Test investigation, additional tests will be conducted as required for Section 28 applications or for other needs. The tests provide information on the characteristics of the aquifer, such as transmissivity, hydraulic conductivity, and coefficient of storage. The information gathered on aquifer characteristics will support cleanup activities, including groundwater model development and calibration. (See Appendix D.)

DIRECTORY TO APPENDICES

The Following Appendices Are Found in This Section:

- A. Projected Groundwater Demands from 2004-05 to 2008-09
- B. Simulated Changes in Groundwater Elevations at Wells or Wellfields in Main San Gabriel Basin
- C. Highlights of Volatile Organic Compounds and Nitrate Concentrations and Wells Vulnerable to Contamination
- D. Potential Sites for Aquifer Performance Tests
- E. Schedule and Preliminary Budget for 2004-05 Five-Year Plan

APPENDIX G
Policy No. 9-00-8

POLICY NO. 9-00-8

UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT

Policy Regarding the Participation of the District in the funding of Wellhead Treatment and Groundwater Remediation Projects in the Main San Gabriel Groundwater Basin

I. Purpose

The purpose of this policy is to set forth criteria and conditions by which the Board of Directors of the Upper San Gabriel Valley Municipal Water District will consider providing funding, exclusively or in cooperation with the San Gabriel Basin Water Quality Authority (WQA), Main San Gabriel Basin Watermaster (Watermaster) and other interested parties, for wellhead treatment and/or groundwater remediation projects in the Main San Gabriel Groundwater Basin. This policy also establishes the general manner and methodology by which such funding can be distributed by the District for approved projects and programs.

II. Statement of Facts

The primary duty of the District is to provide a safe and reliable supplemental water supply for the San Gabriel Valley water agencies. The water supplied by the District is utilized by retail water purveyors to supplement the naturally occurring groundwater pumped from the Basin. The District principally relies on imported sources of water (Sacramento Delta and Colorado River) to satisfy local demand for supplemental water supply.

The annual demand on the District for untreated and treated supplemental water has been as high as 60,000 acre feet. Treated water is used for direct municipal and industrial applications and untreated water is used to augment natural groundwater basin recharge and help mitigate basin over-draft.

As a founding member of the WQA, the District recognizes and supports WQA's §406 Plan ("Plan") (Exhibit A) which provides prescriptive remedies for groundwater contamination in the San Gabriel Valley. In recognition of the Plan and its purpose, the District will work in concert with the WQA to implement the Plan thereby strengthening its position in potentially recovering the funds provided under this policy.

III. Issues

Historic commercial and residential land uses in the San Gabriel Valley have caused the introduction of a wide variety of regulated pollutants to the groundwater basin. In some cases, beneficial use of groundwater is precluded in those areas of the basin where contamination is sufficiently pervasive. Contaminant migration and the discovery of new pollutant species is further limiting the production of groundwater from the basin.

High capital costs create a disincentive for retail water purveyors to construct treatment facilities necessary to keep contaminated wells in operation. As a consequence, opportunities will be lost to remediate the groundwater basin by extracting and treating contaminated water at those impacted sites. Additionally, the deactivation of contaminated wells may cause the contaminants to migrate to otherwise uncontaminated areas of the basin. Further, as the basin water quality continues to degrade, retail purveyors will likely become more reliant on imported water supplies to meet the needs of their customers.

Due to greater competition and higher unit price for imported water supplies, shifting production off the basin carries significant ramifications for the San Gabriel Valley. Such a shift away from groundwater use will effect unfavorable economic and water supply reliability consequences for both residential and commercial customers alike. Thus, the Board of Directors find that it is within the District's scope of responsibility and in the best interest of the public to enact programs that will preserve and optimize the use of the groundwater resources of the San Gabriel Valley.

IV. Policy Objectives

Within the precincts of its statutory authority, budgetary limitations and policy objectives, the District will provide financial assistance for the procurement and/or construction of treatment facilities at contaminated well sites in the San Gabriel Valley. The principle objectives of this program, in no particular order, are:

1. Optimize local utilization of groundwater resources.
2. Reduce or eliminate local reliance on treated, non-interruptible imported water supplies.
3. Maximize local water supply reliability.
4. Provide for wholesale water supply price efficiency.
5. Protect public health and safety.

V. Policy Guidelines

Projects to be considered for approval by the Board must meet the guidelines of this program and satisfy certain criteria to qualify for funding under this program. That criteria is listed as follows:

1. The project must be located within the boundaries of the USGVMWD.
2. The project must be constructed in a manner so as to reactivate, or maintain operation of, an existing well that otherwise could not continue operation because of excessive contamination.
3. The project must be designed such that its operation presents a significant water supply benefit to the public served.
4. The project must be designed such that its operation provides a significant groundwater remediation benefit.

5. The project must employ proven or DHS certified treatment technology to allow for a high probability of success.
6. The project must be structured such that either the District has a reasonable probability of substantial cost recovery from parties responsible for groundwater contamination, or it addresses an urgent and immediate public health and safety crisis that cannot be resolved in a more efficient and effective manner.
7. The project must be reviewed by the District Engineer.

Funding can be provided in several forms depending upon the circumstances surrounding the project. When structuring the distribution of funds, factors such as the likelihood of cost recovery, the future availability of other sources of funding and the primary goals of the project will be considered. To maximize the potential for cost recovery and securing funding from other sources, District project funds will be distributed through the WQA's project accounts where possible.

VI. Implementation Procedure

1. The project proponent will submit a funding request for a conceptual or specific project.
2. Staff will review the request for policy compliance and forward the request to the District Engineer for appraisal.
3. Staff and Engineer will meet with project proponent to resolve any outstanding issues and finalize application materials.
4. Staff and Engineer will consult and coordinate with Watermaster and the WQA to develop a draft implementation plan for the project.
5. Staff and Engineer will prepare a recommendation regarding the proposed project for consideration by the Board of Directors.
6. The Board of Directors will provide staff and Engineer specific direction regarding the proposed project.

Dated this 19th of September, 2000.



President



Secretary

APPENDIX H

WQA 406 Plan

*San Gabriel Basin Groundwater Quality
Management and Remediation Plan
“§406 Plan”*

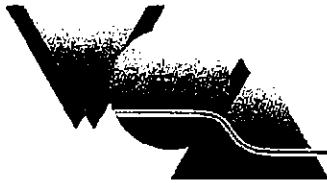
SAN GABRIEL BASIN
Water Quality Authority

Greg Nordbak – Chairman Jim Byerrum – Vice Chairman Bob Kuhn – Treasurer Margaret Clark – Secretary

Carol Montano – Board Member Michael L. Whitehead – Board Member Kenneth R. Manning – Board Member

Cleaning Up Our Groundwater
For Future Generations

March 21, 2005



San Gabriel Basin Water Quality Authority

858 Oak Park Road, Suite 200, Covina, California 91724 • (626) 859-7777 • Fax (626) 859-7788

<http://www.wqa.com>

Executive Summary San Gabriel Basin Groundwater Quality Management and Remediation Plan for Year 2005

Purpose and Goals of Plan

The San Gabriel Basin Groundwater Quality Management and Remediation Plan (“§406 Plan”) amends the San Gabriel Basin Groundwater Quality Management and Remediation Plan adopted in 2004. The §406 Plan is an accelerated plan to clean up groundwater pollution in the San Gabriel Basin. The plan includes project descriptions and identifies funding sources such as responsible parties as well as federal funding through the San Gabriel Basin Restoration Fund and the Title XVI program, state funding through Proposition 13, Proposition 50 and local programs.

The plan recognizes that the pollution problem is so critical in some areas that accelerated action is necessary to halt the spread of underground toxins before they contaminate more drinking water wells and adjacent aquifers. The other major component of the plan is that it places a high priority on recovering the valuable water generated by cleanup facilities for beneficial use.

Having taken federal and state agencies years to define the extent of the pollution and identify responsible parties, the §406 Plan refines WQA’s objectives, principles, remedial standards and activities. These elements will move the WQA into an accelerated phase to achieve results much faster. On-going efforts will now be stepped up to acquire funds from responsible parties while making it clear that the WQA will not sacrifice cleanup and water supply reliability activities and will pursue litigation in those situations in which the parties are not willing to voluntarily participate in a timely manner.

Details of the Plan

- Addresses contamination in the Baldwin Park, El Monte, South El Monte, Puente Valley, Alhambra and Whittier Narrows areas
- Describes funding requirements of cleanup projects in the affected areas
- Pursues voluntary participation from responsible parties except where litigation becomes necessary
- Places a priority on developing projects that combine cleanup with supply
- Seeks to leverage funding from responsible parties, federal, state and local agencies to further the cleanup effort

You may view a copy of the WQA §406 Plan on our website: www.wqa.com

TABLE OF CONTENTS

SUMMARY.....	5
I. LEGAL AUTHORITY.....	6
II. POLICY STATEMENT FOR YEAR 2004.....	6
III. BACKGROUND INFORMATION.....	8
A. OVERVIEW OF THE GROUNDWATER CONTAMINATION.....	8
B. OVERVIEW OF WQA AUTHORITY	9
C. HISTORY OF WQA PLANNING	10
IV. GOALS OF THE WQA §406 PLAN.....	11
A. ACCELERATE REMOVAL OF CONTAMINANT MASS IN THE BASIN	11
B. PREVENT MIGRATION OF CONTAMINATION INTO CRITICAL GROUNDWATER SUPPLIES	12
C. INTEGRATE CLEANUP WITH WATER SUPPLY	13
D. MINIMIZE ECONOMIC IMPACT TO THE PUBLIC.....	15
V. §406 PLAN.....	16
A. DEFINITIONS	16
B. REMEDIAL STANDARDS	16
1. <i>Watermaster Section 28</i>	17
2. <i>larwqcb discharge requirements</i>	17
3. <i>dhs water treatment standards</i>	20
C. OVERARCHING REMEDIAL PRINCIPLES	22
D. OPERABLE UNIT SPECIFIC PLANS	22
VI. FUNDING.....	23
A. POTENTIALLY RESPONSIBLE PARTIES	23
B. FEDERAL GOVERNMENT	24
C. RESTORATION FUNDS (DREIER).....	24
D. TITLE XVI.....	25
E. STATE GOVERNMENT	26
F. WATER QUALITY AUTHORITY	27
G. WATER PURVEYORS/CITIES/MEMBER AGENCIES/OTHER LOCAL WATER AGENCIES	27
VII. PUBLIC INFORMATION	27
VIII. COORDINATION WITH OTHER AGENCIES	29
IX. LITIGATION PLAN	29

TABLE OF CONTENTS (CONTINUED)

VOLUME II

Appendix A – (Operable Unit Specific Plans)

Table 1 – Estimated Cost of Operable Unit Specific Cleanup Plans

Appendix B – (Non-Specific Operable Unit Plans)

Table 2 – Estimated Cost of Non-Specific Operable Unit Plans

Figure 1 – San Gabriel Basin Superfund site

Figure 2 – Prescribed Remedy (Baldwin Park Operable Unit)

Figure 3 – Prescribed Remedy (South El Monte Operable Unit)

Figure 4 – Prescribed Remedy (El Monte Operable Unit)

Figure 5 – Prescribed Remedy (Whittier Narrows Operable Unit)

Figure 6 – Prescribed Remedy (Puente Valley Operable Unit)

Figure 7 – Early Investigation (Area 3)

Figure 8 – Superfund vs. Non-Superfund Contamination

Appendix F – Federal Funding Program Administration

VOLUME III

Appendix C-1 – Memo from MK&B Regarding Remedial Standards

Appendix C-2 – Memo from Latham & Watkins Regarding ARARs

Appendix C-3 – Memo from TCZB Regarding Litigation Strategies

Appendix D-1 – Authority of Main San Gabriel Basin Watermaster

Appendix D-2 – Authority of State Water Resources Control Board and LARWQCB

Appendix D-3 – Authority of California Department of Health Services

Appendix E – U.S. EPA Plans for Each Operable Unit

VOLUME I

I. Legal Authority

This §406 Plan is developed and adopted under the authority of the WQA Act.

§406 of the WQA Act requires the WQA “to develop and adopt a basinwide groundwater quality management and remediation plan” that is required to be consistent with the EPA’s National Contingency Plan (“NCP”) and Records of Decision (“ROD”) and all requirements of the Los Angeles Regional Water Quality Control Board (“LARWQCB”). According to the WQA Act, the §406 Plan must include:

- 1) Characterization of Basin contamination;
- 2) A comprehensive cleanup plan;
- 3) Strategies for financing the design, construction, operation and maintenance of groundwater cleanup facilities;
- 4) Provision for a public information program; and
- 5) Coordination of activities with federal, state, and local entities.

The WQA shall review and adopt this §406 Plan on an annual basis and, if necessary, shall make revisions according to changing regulatory, political and/or funding environments.

In support of the §406 Plan, the WQA shall also adopt an annual fiscal year budget (July 1 through June 30) which shall include all projects (actual or planned) that WQA is facilitating through its participation during that time period. The budget shall identify various funding sources and combinations thereof to ensure that full funding for each project (capital and/or O&M) can be achieved.

II. Policy Statement for Year 2005

The WQA general policy statement is the foundation of the §406 Plan. Therefore, the first steps in revising the §406 Plan are to review the past year’s activities and to identify successes as well as challenges and obstacles that may have delayed or hindered cleanup progress. Using that information as a basis, WQA can apply current conditions and determine WQA’s direction for the coming year.

Summary

As in previous years, the San Gabriel Basin Water Quality Authority ("WQA") is revising its San Gabriel Basin Groundwater Quality Management and Remediation Plan ("§406 Plan"). The §406 Plan which is required by our enabling act ("WQA Act"), Statutes 1992, Chapter 776 (West's California Water Code Appendix, §134-101 et seq.) promotes improvement of groundwater quality in the San Gabriel Basin ("Basin") by setting forth: (1) a general process under which this plan shall be developed and implemented; (2) remedial goals; and (3) a restatement of existing regulatory authority governing cleanup within the Basin, in addition to requirements of the United States Environmental Protection Agency ("EPA"). Additionally, elements of the §406 Plan fit into a framework of overarching remedial principals and sets forth specific projects proposed to be facilitated by the WQA or by others within the Basin.

Date:

This §406 Plan is effective March 21, 2005.

Address:

Supporting materials are available for viewing at WQA offices, located at 858 Oak Park Road, Suite 200, Covina, CA 91724. WQA offices are open from 8:00 a.m. to 5:00 p.m., Monday through Friday, excluding recognized holidays. It is recommended that an appointment be made to review these materials by calling (626) 859-7777.

General Information:

For general information, WQA may be contacted at (626) 859-7777 between the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday, excluding recognized holidays. Various materials may also be viewed on the Internet at www.wqa.com.

POLICY STATEMENT 2005

The WQA was created and authorized by the State Legislature to address the critical need for coordinated groundwater cleanup programs in the San Gabriel Basin. The WQA is committed: 1) to protecting public health and safety; 2) to prioritizing, facilitating, and coordinating groundwater cleanup/supply programs with local water providers and/or U.S. EPA; and 3) to minimizing local financial and economic impacts, including impacts on local groundwater consumers. The WQA recognizes that groundwater contamination issues in the San Gabriel Basin are complex and the U.S. EPA Superfund response alone may not adequately address the environmental, regulatory and financial issues that affect the one million residents and the many thousands of businesses who rely primarily on the San Gabriel Basin for potable water. In order to address affected local water supplies, as well as cleanup and containment goals, WQA will promote and participate in technical and financial partnerships, wherever possible. If partnerships cannot be voluntarily formed in a timely manner, WQA will seek ways to move forward and implement the necessary groundwater cleanup and will consider all options to require financial participation from those responsible for the contamination.

Based upon this analysis, WQA will modify its direction to pro-actively approach the rapidly growing problems of emerging chemicals (“EC”). Requests and competition for federal and state funding (primarily due to nationwide perchlorate problems) have escalated significantly in the last year. At the same time, local groundwater providers continue to face growing ambiguity and sometimes conflicting federal and state requirements.

The revised Policy Statement will become effective with the adoption of this document and will remain in effect until institutional, environmental or other changes necessitate a revision of the Policy Statement.

III. Background Information

A. OVERVIEW OF THE GROUNDWATER CONTAMINATION

The San Gabriel Valley's groundwater Basin has the dubious distinction of being one of the most contaminated in the nation. The Basin's groundwater is contaminated from the ground disposal—dating back to World War II— of synthetic organic compounds used primarily as solvents in industrial and commercial activities.

The seriousness of the groundwater contamination problem became evident when high concentrations of volatile organic compounds (“VOCs”) were discovered in Azusa in 1979 near a major industrial complex. Over the next four years, further investigation revealed widespread VOC contamination significantly impacting the Basin. This discovery led EPA to place four portions of the Basin on the NPL under authority of Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), also known as the Superfund program.

Unfortunately in 1997, newly detected contaminants, perchlorate and N-Nitrosodimethylamine (NDMA) liquid/solid rocket fuel, complicated and delayed progress. Most notably affected was the largest geographical area of the San Gabriel Valley Superfund site known as the Baldwin Park Operable Unit (BPOU). This led EPA, state and local agencies to conduct further investigation of the sources and treatment technologies available for remediating potable water.

In prior years, several VOC treatment/supply projects were expanded at significant costs to treat perchlorate and other emerging compounds. More recently, many of these multiple treatment train projects were further burdened with increased levels of VOCs. As a result, additional VOC treatment, also known as “dual-barrier”, was needed to meet State Department of Health Services (“DHS”) permitting requirements under their Technical Memorandum 97-005. While the additional treatment is necessary, each step has incrementally increased the costs of capital construction and operations and maintenance resulting in an overall project cost 4 to 5 times the original VOC treatment/supply project. Of all of the operable units in the basin, South El Monte Operable Unit (“SEMOU”) has been affected the most by the need for additional treatment.

B. OVERVIEW OF WQA AUTHORITY

WQA was formed by special act of the California Legislature (Senate Bill 1679, Russell). The WQA Act gives WQA authority, *inter alia*, to plan for and to coordinate among several agencies with authority affecting cleanup of the Basin. §406 of the WQA Act requires WQA to develop and adopt a basinwide groundwater quality management and remediation plan. §406 further requires the plan to provide for: (1) a characterization of the Basin’s contamination; (2) the development and implementation of a comprehensive Basin cleanup plan; (3) the financing of the design, construction, operation, and maintenance of groundwater cleanup facilities; (4) provisions for a public information and participation program; (5) the coordination with federal, state and local entities; and (6) the maintaining of consistency with the National Contingency Plan, any applicable EPA RODs, all LARWQCB requirements, and all applicable cleanup agreements with federal, state and local agencies. The §406 Plan has to be developed with an eye toward the statutory requirement that “the basin-wide plan shall consider the benefits to be achieved by the plan or any proposed project in relation to its economic impact on persons or entities within the boundaries of the authority.”

C. HISTORY OF WQA PLANNING

As required by §406, WQA first adopted the §406 Plan in June of 1993. This plan identified a mission and eight goals and served as the guiding principles over the next six years of early action projects to remove and contain contamination (well ahead of the Superfund-mandated process) and to characterize the extent and movement of contamination.

Once the data, necessary to design and construct projects on a regional basis, was available, including information on the extent and movement of groundwater contamination, the WQA officially adopted the amended the §406 Plan on March 6, 2000. Since that time, the WQA, using the §406 Plan as its implementation guide, facilitated the design and/or construction of several treatment facilities described within the §406 Plan.

As in previous years, the WQA will continue to assist EPA with its response efforts by engaging the authority of other agencies. Section 102(b) of the WQA Act declares legislative intent directing the WQA to coordinate among state and federal government agencies to plan and implement groundwater cleanup. The Remedial Standards (Section V(b)) established by the §406 Plan (as required by Section 106 of the WQA Act) incorporate rules, regulations and standards previously adopted by other agencies of the State of California. The Remedial Standards harmonize and coordinate the requirements of the Main San Gabriel Basin Watermaster ("Watermaster"), the State Water Resources Control Board ("SWRCB"), the LARWQCB, and the DHS. One purpose of the Remedial Standards is to help integrate groundwater cleanup objectives with water supply objectives, according to the legislative intent directive set forth in Section 102(a) of the WQA Act.

The EPA has recognized some of these Remedial Standards as applicable or relevant and appropriate requirements (ARARs). Federal Superfund Law requires parties responsible for pollution to comply with ARARs in the process of carrying out federal cleanup orders. ARARs include any State standard that is (1) more stringent than any Federal requirement, (2) validly promulgated, (3) either "applicable" or "relevant and appropriate" and has been identified by the State to the USEPA. Due in part to the efforts of the WQA, the EPA's Unilateral Administrative Order (No. 2003-17)

for remedial design and remedial action in the SEMOU of the San Gabriel Valley Superfund Sites, issued on August 28, 2003, (1) encourages the parties identified as responsible for the pollution to integrate their cleanup obligations with water supply projects that exist or are under development and (2) directs compliance with ARARs, such as meeting water quality standards for potable water service established by DHS and/or for discharge of the product water established by the LARWQCB.

IV. Goals of the WQA §406 Plan

Originally, WQA's goals were developed as a result of discussions with federal, state and local agencies, various stakeholders, and comments heard at public workshops and hearings. Each year, the goals are re-evaluated to determine applicability and whether any additional goals should be added. While these goals have remained unchanged, WQA has expanded the descriptions under the four goals to further validate WQA's focus. The four goals are:

- 1) Accelerate Removal of Contaminant Mass in the Basin;
- 2) Prevent Migration of Contamination into Critical Groundwater Supplies;
- 3) Integrate Cleanup with Water Supply; and
- 4) Minimize Economic Impact to the Public.

In the following sections, each of the four goals are described in more detail.

A. ACCELERATE REMOVAL OF CONTAMINANT MASS IN THE BASIN

In recent years, it has become increasingly apparent that cleanup actions, implemented earlier than CERCLA provides, are needed to address the immediate threats to the local water supplies. The goal of accelerating the removal of contaminant mass is fulfilled primarily by engaging the regulatory processes of other agencies of the State, and, wherever possible, prompting the implementation of activities ahead of the time required under the applicable regulatory process.

In the past, the WQA identified and focused its accelerated removal activities on projects that could immediately be implemented to remove contaminant mass. In more recent years, the focus has changed due to the ever-growing list of impacted water supply wells. This widespread impact has necessitated the early implementation of several treatment facilities by water purveyors, individually and jointly with the WQA and/or other agencies well ahead of the mandate from regulatory agencies.

With the rapid migration of contamination towards critical water supplies, the WQA now primarily focuses on projects that will accelerate and advance cleanup activities while providing a clean water supply. More of these types of early actions are necessary to either (1) remove contaminant mass to immediately prevent further degradation of downgradient aquifers, (2) contain the spread of contamination to protect critical water supplies, (3) restore critical water supplies, or (4) combine the aforementioned.

Although early actions are implemented before a regulatory mandate, there has and will continue to be extensive coordination with EPA and the LARWQCB to link the early action to the eventual mandate. By working closely with EPA, the WQA and other local stakeholders can affect EPA's decision-making and identify certain high priority cleanup projects that are consistent with EPA's objectives. Although EPA cannot formally endorse and mandate cleanup until a rigorous process is completed, WQA can facilitate and assist in the implementation of the required action well before the mandate. Several crisis situations exist within the Basin that demand this type of immediate action as described in Appendix A. Waiting on mandated actions have already had severe impacts in many parts of the Basin.

B. PREVENT MIGRATION OF CONTAMINATION INTO CRITICAL GROUNDWATER SUPPLIES

In many parts of the Basin, the contamination continues to spread towards, and threaten groundwater supply wells. Given that so many supply wells have already been shut down, the current situation continues to represent a significant threat to the Basin's water supply. Therefore, priority must be given to implementing cleanup projects that will prevent the loss of water supplies. In order to meet this goal, contaminant migration must be implemented quickly so that constituents will be prevented from entering clean

supplies. Further, this action must also prevent constituents from entering supplies with existing treatment not built or suited to treat the threatening contaminant(s). The goal to contain the contamination is supported with actions that specifically address threats to groundwater pumping centers. Loss of major production centers will continue to impair the water supply unless these types of threats are immediately addressed in a cleanup plan.

The Watermaster has existing rules and regulations which govern the location and production of water wells for water quality purposes. The WQA under this §406 Plan will work with the Watermaster and its existing rules and regulations to help contain and control the migration of contaminants within the Basin.

C. INTEGRATE CLEANUP WITH WATER SUPPLY

With so much of the local water supply impaired, it is essential that water treated from the cleanup projects be put to its highest and best use. Putting the treated water back into the supply system will serve to enhance the overall water supply situation in the Basin and help many water purveyors mitigate the threat to their water supply. The desired objectives can be achieved by maximizing the use of existing facilities that have either been shut down or have been impaired. When new facilities are needed, these should be integrated into the supply of the appropriate water purveyor.

If cleanup facilities are built without the consideration of the local supply, then many water purveyors will be forced to build redundant treatment facilities on impaired wells or import increasingly scarce surface supplies from other areas. Currently, water purveyors only use surface water sources when they are readily available or when groundwater sources become impaired or unavailable; otherwise the predominant source of supply is from the local groundwater.

Although cleanup projects that put treated water to beneficial use will provide localized benefits, there are, of course, broad benefits that impact the regional water supply situation in California. The necessity to develop new sources and to fully utilize existing sources is very evident in court decisions within the State and the Colorado River Watershed. For example, the 2003 Quantification Settlement Agreement ("QSA") between the United States Department of the Interior and Southern California Colorado

River users restricts the State's withdrawal of Colorado River water to its original allotment of 4.4 million acre-ft per year in non-surplus years. In addition, the dependability of the State Water Project is decreasing as a result of a lack of storage facilities, and there are potential restrictions that may result from the ongoing CALFED process. Now more than ever, it is critical to protect and develop the groundwater resources so that both groundwater and surface waters of the State can be managed more effectively. Critical to this statewide need is the full utilization and restoration of the Basin groundwater.

The Los Angeles County Superior Court has Constitutional authority, through its continuing jurisdiction under the Judgment in the case of *Upper San Gabriel Valley Municipal Water District v. City of Alhambra*, LACSC 924128, to promote the beneficial use of water and to prevent the waste of water in the Basin. Through the Court's continuing jurisdiction under the Judgment, the Watermaster has adopted rules and regulations governing the location and production of water wells for water quality purposes. The LARWQCB has Constitutional, statutory and regulatory authority to regulate discharges to waters of the State, to promote the beneficial use of water, and to prevent the waste of water. DHS has statutory and regulatory authority to set and enforce standards for public drinking water systems, including acceptable water treatment processes. The WQA intends to engage the existing rules, regulations and standards of these agencies of the State to coordinate and promote the reasonable and beneficial use of water produced and treated under mandate from the EPA. WQA recognizes that a number of voluntary or consensual arrangements ultimately will be required to implement the objective to integrate water cleanup operations and water supply operations in the Basin. In addition to engaging existing regulatory authority held by other agencies, WQA intends to encourage the needed voluntary or consensual arrangements through the exercise of authority under the WQA Act, including its authority to seek recovery of WQA's costs to respond to and cleanup groundwater contamination in the Basin.

D. MINIMIZE ECONOMIC IMPACT TO THE PUBLIC

The issue of who pays for the cleanup is often the biggest obstacle in initiating the necessary cleanup programs. Although Potentially Responsible Parties (PRPs) may be held completely liable for the costs of a response action under the CERCLA mandate, actions normally do not occur until a lengthy process is completed. Equally detrimental to the water supply crisis is the fact that there is no assurance that the immediate water supply concerns will be addressed under CERCLA. Therefore, many water purveyors may still need to construct their own treatment facilities or look for alternative supplies at their own expense even after the PRPs fulfill their obligation under CERCLA.

Adding to the economic complexity of the situation is the fact that EPA conducts its own detailed financial evaluation of PRPs and may settle for a reduced amount. And even then, many businesses cannot fully absorb the financial liability without detrimentally impacting their businesses. In the meantime, the spread of contamination continues to impact more water supply sources and, by extension, the basic reliability of plentiful water to support the economic basis and vitality of the Basin. To address this goal, WQA has pursued and continues to aggressively pursue sources of funding from responsible parties and the federal/state government. Despite these efforts, organizations like WQA and some of the local water purveyors have had to pool their own resources to immediately initiate many of the required response actions. This has required a financial commitment on behalf of the local public (at least initially). Early actions financed outside of the CERCLA process have been necessary to assure that many of the critical projects are implemented quickly. In addition, cleanup projects such as those prescribed by WQA are designed from a local perspective to address groundwater cleanup in conjunction with the water supply. However, costs borne by the public for this effort would have to be absorbed or recovered through litigation.

To accommodate potentially conflicting goals between accelerating cleanup and minimizing impact to water rate payers, WQA has identified high priority response actions that can be implemented ahead of EPA's mandate using available financial resources, including federal reimbursement funding, and in some cases, financial participation from PRPs. If a required project lacks sufficient funding, a commitment by

the affected water purveyors and/or WQA through its assessment, along with other potential local sources, will be required. Where WQA is required to use its own assessment to quickly assist in the development of a project, WQA will always consider cost recovery actions to minimize costs borne by the public. To that end, WQA has already filed two cost recovery actions and may be soon considering other cost recovery actions against those responsible entities that chose not to participate in the sponsored early remedial actions.

V. §406 Plan

A. DEFINITIONS

1. This §406 Plan incorporates by reference the definitions of “facility,” “hazardous substance,” “national contingency plan,” and “person”. The terms “remedial action,” or “remedy,” or “cleanup,” or “remediation,” are used interchangeably herein. Additionally, such terms are intended to be encompassed by the definitions of “remove,” “removal,” “remedy,” “remedial action,” “respond,” or “response,” as appropriate and as those terms are defined in Title 42 (CERCLA) of the United States Code, § 9601, as amended.

2. This §406 Plan incorporates by reference Title 42 of the United States Code, §9607 (a), as amended, the class of persons who are PRPs for the cleanup of hazardous substances.

B. REMEDIAL STANDARDS

The WQA has identified certain appropriate rules, regulations and standards for the management of Basin remedial actions from among the rules, regulations and standards promulgated by the Watermaster, the LARWQCB and DHS. The rules, regulations and standards specified below are incorporated by reference in this §406 Plan and adopted as the Remedial Standards of the WQA.

These Remedial Standards, and the underlying existing rules, regulations and standards of the Watermaster, LARWQCB and DHS are additional requirements of the State which are applicable or relevant and appropriate to remedial actions ordered by the EPA in the Basin. (See Appendix C-2).

WQA will engage the existing procedures of the Watermaster, the LARWQCB and the DHS to implement the following Remedial Standards so that all remedial actions affecting Basin groundwater shall be conducted accordingly.

1. WATERMASTER SECTION 28

In furtherance of two objectives of this §406 Plan to prevent migration of contamination into critical groundwater supplies and to integrate cleanup activities with water supply operations, production of Basin water for remedial action purposes shall be carried out in conformance with Section 28 of the Rules and Regulations adopted by the Watermaster under authority of the Amended Judgment in *Upper San Gabriel Valley Municipal Water District vs. City of Alhambra*, Los Angeles County Superior Court Case No. 924128. (See Appendix C-1). Under this Remedial Standard water wells used for remedial action purposes shall be located, with the approval of the Watermaster, both to prevent migration of contaminated groundwater and to best integrate the water produced for remedial action with water supply operations in the Basin. If necessary, WQA will engage the existing implementation and enforcement procedures of the Watermaster to carry out this Remedial Standard. Section 28 of the Watermaster Rules and Regulations is attached as Appendix D-1 and incorporated herein.

2. LARWQCB DISCHARGE REQUIREMENTS

In furtherance of an objective of this §406 Plan to integrate cleanup activities with water supply operations, disposal of Basin water produced for remedial action purposes shall be carried out in conformance with discharge requirements issued by the LARWQCB and, if necessary, approved by the SWRCB. (See Appendix C-1). Under this Remedial Standard, Basin water produced and treated for remedial action purposes shall not be wasted and such water shall be put to the greatest reasonable and beneficial use of which it is capable. Conversely, the waste and unreasonable use or unreasonable method of use of such waters shall be prohibited. Additionally, under this Remedial Standard, Basin water produced and treated for remedial action purposes shall not be discharged to the environment except in conformance with discharge requirements issued by the LARWQCB.

The SWRCB and the LARWQCB are both subject to the requirements of the California State Constitution and California Water Code § 100 *et seq.* to promote the greatest reasonable and beneficial uses of the waters of the State and to prevent the waste and unreasonable use and unreasonable method of use of those waters. SWRCB's express statutory authority to prevent the waste and unreasonable use of water is set forth in Water Code § 275 which provides as follows:

"The department and board shall take all appropriate proceedings or actions before executive, legislative, or judicial agencies to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water in this state"

The LARWQCB exists, pursuant to Water Code §§ 13200-13201, as a branch of the SWRCB. The LARWQCB exercises its authority to regulate discharges to promote the beneficial use of water and prevent waste through the issuance of waste discharge requirements. Waste discharge requirements are predicated upon the water quality control plan ("Basin Plan") that each regional board is required to promulgate according to Water Code § 13241. Water Code § 13263(a) requires each regional board to issue discharge permits in conformity with its adopted Basin Plan.

Discharge requirements issued by the LARWQCB must be conditioned, taking into consideration the beneficial use of water, pursuant to Water Code § 13263(a), as follows:

"The regional board, after any necessary hearing, shall prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge, except discharges into a community sewer system, with relation to the conditions existing in the disposal area or receiving waters upon, or into which, the discharge is made or proposed. The requirements shall implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected, the water quality objectives

reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241.”

Thus, in enacting Water Code §§ 13241 and 13263, the State has expressly stated its intent that the regional boards exercise their authority to regulate discharges to promote the beneficial use of water and prevent waste through the issuance of waste discharge requirements. Pursuant to the express terms of these statutes, this authority includes the prohibition on any discharge that is wasteful and does not promote the beneficial use of water.

The State has been approved to issue National Pollutant Discharge Elimination System (“NPDES”) Program permits under the Federal Clean Water Act. Under that authority, the LARWQCB issued General NPDES Permit No. CAG914001 (the “General Permit”), adopted by Order No. R4-2002-0107 on May 23, 2002. The General Permit establishes Waste Discharge Requirements for discharges of Treated Groundwater from Investigation and/or Cleanup of Volatile Organic Compounds Contaminated-Sites to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties. The General Permit prohibits, for example, the daily discharge of an effluent containing more than 4 ppb perchlorate (See General Permit, F (Effluent Limitations)).

The standards contained in the General Permit are ARARs. They were properly promulgated because they were adopted pursuant to the authority granted to the State under 40 CFR parts 122 and 123 and Section 402 of the Clean Water Act and other State authorities, including Water Code § 13263. The General Permit is generally applicable – it serves as a general NPDES permit and covers discharges to all surface waters in the Los Angeles Region (See General Permit, ¶23.). It is enforceable both administratively and through the Superior Court (See Water Code §§ 13300 et seq.). Finally, the General Permit standards are legally applicable or relevant and appropriate as state standards stricter than current federal standards. Thus, the standards set forth in the General Permit are ARARs.

If necessary, WQA will engage the implementation and enforcement procedures of SWRCB and LARWQCB to carry out this Remedial Standard. The applicable rules,

regulations and standards of SWRCB and LARWQCB are attached as Appendix D-2 and incorporated herein.

3. DHS WATER TREATMENT STANDARDS

In furtherance of an objective of this §406 Plan to integrate cleanup activities with water supply operations, water treatment for remedial action purposes shall be carried out in conformance with treatment standards for public drinking water systems adopted by the DHS (See Appendix C-3). Under this Remedial Standard, Basin water produced and treated for remedial action purposes shall not be wasted and such water shall be put to the greatest reasonable and beneficial use of which it is capable. Conversely, the waste and unreasonable use or unreasonable method of use of such waters shall be prohibited. Under authority of §106 of the California Water Code, domestic use is the highest beneficial use of water. Unless discharge or other use of the Basin water produced and treated for remedial action purposes is approved by the LARWQCB, all such water shall be made available for domestic use through public drinking water systems. Under this Remedial Standard, Basin water produced for remedial action, with the approval of the DHS, shall be integrated into water supply operations in the Basin.

The California Safe Drinking Water Act (Health & Safety Code §§ 116275 *et seq.*) (the "Act"), contains public water supply permitting provisions which authorize DHS to set permit conditions for water delivered by public water systems. In Section 116270(e) of the Act, the Legislature declared its intent to "ensure that the water delivered by public water systems of this state shall at all times be pure, wholesome, and potable." In addition, in Section 116270(g) of the Act, the Legislature declared its intent "to establish a drinking water regulatory program within the State Department of Health Services in order to provide for the orderly and efficient delivery of safe drinking water within the state and to give the establishment of drinking water standards and public health goals greater emphasis and visibility within the state department."

In 1997, the Chief of the Division of Drinking Water and Environmental Management of the DHS drafted a "Guidance for Direct Use of Extremely Impaired Sources" memorandum known as Policy Memo 97-005 ("Policy 97-005"). According to

Policy 97-005, it is a memorandum that provides guidance to DHS staff on the evaluation of extremely impaired sources of water for use as a supply of drinking water.

Pursuant to Policy 97-005, the following findings are required of DHS for approval to use an extremely impaired source¹:

- 1) Drinking water MCLs and Action Levels² will not be exceeded if the permit is complied with; and
- (2) The potential for human health risk is minimized, and the risk associated with the project is less than or equal to the alternatives.

As set forth in Appendix C-2, the permit conditions in Policy 97-005 will be considered state ARARs if (1) they are more stringent than federal standards (2) they are properly promulgated standards, requirements, criteria or limitations, and (3) they are legally applicable or relevant and appropriate. The Policy 97-005 permit requirements are more stringent than federal standards. The requirements were “properly promulgated” because they are based on laws adopted by the California Legislature and administrative standards developed by the DHS. Finally, they are of general applicability to anyone who introduces water from extremely impaired sources into the drinking water system. Thus, the permit conditions in Policy 97-005 are ARARs.

If necessary, WQA will engage the implementation and enforcement procedures of the DHS to carry out this Remedial Standard. A copy of Policy 97-005 and the applicable rules, regulations and standards of DHS are attached as Appendix D-3 and incorporated herein.

¹ An extremely impaired source, according to Policy 97-005, is one that meets one or more of the following criteria: 1) exceeds 10 times an MCL or action level (AL) based on chronic health effects, 2) exceeds 3 times an MCL or AL based on acute health effects, 3) is a surface water that requires more than 4 log *Giardia*/5 log virus reduction, 4) is extremely threatened with contamination due to proximity to known contaminating activities, 5) contains a mixture of contaminants of health concern or 6) is designed to intercept known contaminants of health concern.

C. OVERARCHING REMEDIAL PRINCIPLES

These principles represent the general guidelines that will steer the implementation of the strategies and tactics contained in this §406 Plan.

1. Consensual participation in remedial activities shall be maximized.
2. Consistency with EPA actions and Watermaster Section 28 shall be maintained.
3. Control of decisions by the local public (i.e., producers and the water consumers/rate payers they represent) affecting groundwater quality and water supplies shall be maintained.
4. Expedite remedial activities, as appropriate, by providing incentives, such as (a) avoiding litigation costs and risks (e.g. adverse judgment, exposure to other PRPs/agencies, etc.), (b) providing funds from federal, state, the WQA or other sources, and (c) utilizing existing water producing/treatment equipment, where appropriate.
5. The overall economic impact to water consumers shall be minimized for all response actions by requiring financial participation from any party responsible for the contamination. Within the discretion of the WQA, a cost recovery action, including but not limited to a request for joint and several liability, will be initiated against any responsible party not participating at a financial level acceptable to WQA.
6. WQA shall facilitate the acceleration of the removal of contaminant mass in the Basin by working with the EPA, water purveyors and PRPs to (a) identify high priority cleanup projects that are consistent with EPA objectives, and (b) begin implementation of the required remedy as soon as possible. Cleanup projects that prevent or otherwise restrict the lateral or vertical migration of contamination shall be given higher ranking over those cleanup projects that do not prevent such migration.
7. Treated water shall be used for its highest and best use.

D. OPERABLE UNIT SPECIFIC PLANS

After more than 10 years of studies and investigations, EPA's CERCLA activities have progressed to a point where the configuration of the required remedies, in conjunction with local needs, can be determined. In general, these remedies include multiple groundwater extraction and treatment facilities designed to remove and contain

the spread of contamination. Appendix A summarizes WQA's specific plans for the individual operable units including key components and OU specific issues. Table 1 identifies the annual estimated costs of each project within the Basin OU boundaries through FY 2009-10.

VI. Funding

The WQA has and continues to be committed to accelerating cleanup, integrating cleanup with water supply, preventing migration, and minimizing the financial impact to the public through its annual assessment. In order to meet these goals, adequate funds, primarily from PRPs, state and/or federal programs, are necessary for implementation. While the WQA recognizes that PRPs must fulfill their CERCLA liabilities, it is often a very slow process - a process that jeopardizes the time and cost of implementing projects. In addition, even though EPA has urged PRPs to consider affected water supplies, the CERCLA process does not allow EPA to require it. It is for these reasons that WQA is determined to aggressively seek funds from PRPs before, during and after project implementation, either voluntarily, through mandated CERCLA actions or through litigation measures. If funds cannot be generated from PRPs to begin an identified early action project, WQA will work with individual purveyors, Watermaster and/or other local agencies to develop funding for the project using federal and/or state funds, WQA member agency funds, including individual purveyors, and only if necessary, its own assessment. This section prioritizes each potential source of funding in the order of which it will be sought for a particular early response action.

A. POTENTIALLY RESPONSIBLE PARTIES

As stated previously, WQA will seek voluntary funds from those responsible for the contamination. If the process of acquiring those funds is unilaterally stalemating or delaying the project, the WQA will move forward without this source of funds to ensure necessary cleanup/water supply projects are implemented.

The WQA is committed to securing PRP funding for any given project by providing incentives for PRPs to participate financially. In the absence of sufficient PRP funds, WQA and others may be required to combine its resources to fund a project. In

this event, WQA may choose to initiate cost recovery actions. This was the case in the BPOU, in which WQA brought two separate legal actions against PRPs in the year 2000 to recover costs incurred from the La Puente Valley County Water District ("LPVCWD") Treatment Plant and the Big Dalton Well Treatment Facility.

In 2002, WQA along with three affected purveyors (water entities) jointly settled with 13 of the more than 60 PRPs in the South El Monte Operable Unit. Thereafter, the water entities initiated litigation against the remaining PRPs in a concerted effort to recover escalating costs and ensuring funds for future operations of the cleanup projects built with WQA participation.

B. FEDERAL GOVERNMENT

WQA, with the support and assistance of other local agencies, has sought and continues to seek all funding that may be available for projects in the Basin. As a result of those efforts, two federal programs have been authorized by Congress specifically for the Basin. Both of these reimbursement programs are administered through the United States Bureau of Reclamation ("USBR") directly to the WQA. In February of 2001, WQA adopted a set of procedures called the Federal Funding Program Administration (Appendix F) to guide the allocation process for both programs.

Both sources of federal funding will be used to the maximum extent possible to accelerate cleanup and to provide incentives for PRPs to address affected water suppliers while implementing cleanup actions in the Basin under CERCLA.

C. RESTORATION FUND (DREIER)

In December of 2000, Congress authorized the San Gabriel Basin Restoration Fund ("Restoration Fund"). The authorization of the Restoration Fund, when fully appropriated, will provide \$75 million for groundwater cleanup in the Basin. Since that time, a total of \$55 million has been appropriated and allocated to cleanup projects throughout the Basin.

This program requires a 35% non-federal match deposited into the Restoration Fund to reimburse the WQA up to a maximum of 65% from federal sources. Non-federal funds are classified as funds that are not from the Department of the Interior, but

rather PRP funds, state funds, local municipality funds, purveyor funds, WQA assessment funds or non-profit funds. Funds from this program may be used for design, construction and operation & maintenance for up to 10 years following construction. The Restoration Fund is administered via the USBR in conjunction with the WQA for use within the Basin.

Congress acknowledged that millions of dollars had already been spent to protect the Basin groundwater by remediating groundwater contamination and preventing further contamination. Due to the emergency nature of the contamination and the threat it posed to the local groundwater supply, Congress allowed the use of those past expenditures as a credit towards the 35% non-federal matching requirement under this program. The USBR is responsible for approving all qualifying prior expenditures. However, the WQA, at its discretion, will use this credit to meet the 35% matching requirement and eliminate the need to deposit additional funds into the Restoration Fund.

As of 2002, WQA has accumulated past cleanup cost information totaling more than \$47 million. This amount is sufficient to meet the 35% non-federal matching requirement for the \$55 million appropriated by Congress and deposited into the Restoration Fund to date. Based on more recent information, it is clear that additional funding will be required to continue the progress of ensuring that remedial activities will be combined with local water supply needs. To this end, in 2005, the WQA will seek an additional \$15 million appropriation for the Restoration Fund. Additionally, the WQA will seek to raise the cap on the Restoration Fund by \$50 million.

D. TITLE XVI

In 1992, Congress authorized the San Gabriel Basin Demonstration Project to implement conjunctive use projects in the Basin. By implementing cleanup projects that provide a reliable source of water and reduce the need for outside sources of water, many of the Basin's cleanup projects are eligible for this program.

This program requires a 75% match from non-federal sources to reimburse the project up to a maximum of 25% from federal sources. Funds from this program may

be used for design and construction only. The Title XVI fund is administered via the USBR directly to the WQA for use within the Basin.

Based on the Basin's enormous need for funds, the WQA will (1) continue to work to secure full appropriation of the remaining funds in the Title XVI authorization, and 2) work with Congress to seek legislation authorizing the transfer of any unobligated funds in the Title XVI program to the Restoration Fund.

In 2004, Congresswoman Grace Napolitano authored HR 1284 which was passed and signed into law. The legislation raised the cap on the Title XVI program by \$12 million. The total authorization for the Title XVI program is now \$50.5 million.

E. STATE GOVERNMENT

In 2000, voters passed Proposition 13, which authorized the Safe Drinking Water, Clean Water, Watershed Protection, Flood Protection Bond Act, which, in part, authorized \$7 million in funding assistance for groundwater cleanup programs. Although the original intent of the language was to provide grant funds, the Department of Toxic Substances Control ("DTSC") has chosen to interpret the funding language to mean loan funds. To that end, DTSC established procedures in 2001 for a low interest 20-year loan. In response to DTSC's solicitation of applications, WQA applied for all of the funds on behalf of the Valley County Water District ("VCWD") Sub-Area 1 BPOU project and was awarded the entire amount.

As described in the previous federal funding sections regarding the Restoration Fund and Title XVI funds, a non-federal match is required in order to release the federal funds. While WQA will continue to work with PRPs to help meet that match, additional funds will be needed to release the millions of federal dollars dedicated to the Basin cleanup. To date, the State's participation in cleanup has been nominal. And in recognition that the State's budgetary crisis has led to a shortage of direct funding, the WQA will, instead, focus on securing bond funds such as the \$30 million through the recently passed Proposition 50, the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002. Unfortunately, the ability for WQA to compete for these funds has been hindered by internal policies developed by the DTSC and the SWRCB. To resolve this barrier, the WQA will concentrate its efforts on legislative remedies.

Additionally, in order to augment the State's participation in groundwater cleanup, WQA will continue to work on having the \$7 million Proposition 13 loan forgiven.

F. WATER QUALITY AUTHORITY

WQA may impose an annual assessment for capital and operational costs not to exceed \$10 per acre-foot. In the past, it has been WQA's policy to utilize assessment dollars to provide incentives for PRPs to move forward on a given project. With the recent availability of significant federal funds, these funds will only be utilized if sufficient federal and/or state dollars are or will not be available in addition to PRP funds. If PRPs do not voluntarily provide funds to a project, then the WQA will, on a project-by-project basis, consider the use of assessment funds to underwrite the project costs with or without other local dollars. However, the WQA is committed to recovering its costs from non-participating PRPs at a later date, so that the cost to the local consumer will ultimately be minimized.

G. WATER PURVEYORS/CITIES/MEMBER AGENCIES/OTHER LOCAL WATER AGENCIES

As of January 2001, all potential projects requesting WQA participation must go through WQA's Procedure No. 38, "WQA Project Participation". As part of that procedure, the WQA requires the impacted water purveyor to fund or secure funds other than WQA's assessment representing a minimum of 25% of capital costs. In the event projects cannot be otherwise fully funded using any or all of the above funding sources, WQA will work with an affected city, member water agency and/or other local water agencies to develop potential funding sources. The WQA will pursue the recovery of these funds on behalf of the participating agency, if necessary.

VII. Public Information

The WQA has succeeded over a number of years in building public support for cleaning up contaminated groundwater in the Basin. The public information program will continue to build on that effort to foster understanding of the WQA's mission, projects and accomplishments and plans, and to encourage public participation in the cleanup process. The WQA will undertake efforts to ensure that all stakeholders,

including the general public, understand projects that involve the WQA and have ample opportunity to contribute ideas and opinions.

The program will employ a variety of methods to reach everyone from specialized audiences, such as the local water community and legislators in Sacramento and Washington, to the general public in the Basin and beyond. The WQA will constantly update its web site to provide instant access to public information, including news releases, publications, agendas, minutes of meetings, and reports on projects. In addition to WQA-specific issues, the WQA web site links to local, state and federal water agencies and organizations, giving the public immediate access to information on many local water issues, including groundwater contamination and cleanup activities. It also gives access to the names of officials who can be contacted for further information.

The WQA will work to keep the local offices of federal and state legislators informed of any developments and the progress of water cleanup issues in the Basin. These efforts will include office visits, tours of treatment facilities and an invitation to participate in the WQA legislative committee. The WQA has continued to host the Legislative Water Forum Luncheon in which local legislators are invited to provide updates on state legislation as it pertains to the Basin water community. Speakers in the series to date have included United States Senator's Barbara Boxer and Dianne Feinstein, Congressman David Dreier, Congresswoman Hilda Solis, Congresswoman Lucille Roybal-Allard and Assemblywoman Judy Chu.

The public information program uses a variety of written publications to carry its message. These may include annual reports, brochures, bulletins for specific projects and periodic news inserts in the *San Gabriel Valley Tribune*, *Pasadena Star News* and the *Whittier Daily News*, which are all published by the Los Angeles News Group. The inserts are distributed throughout the Basin, through home and business delivery and general sales of the Los Angeles News Group. The WQA will continue to provide the public with the latest information on its projects and programs

The WQA will continue to work closely with the news media and other organizations to reach the public. It will distribute press releases, contact and meet with reporters and editors to inform them of activities respond to press inquiries and take other steps to encourage media interest. The WQA will continue to work with major

news outlets, such as the Los Angeles News Group, *Los Angeles Times*, and foreign language publications, such as *La Opinion* and the *Chinese Daily News*. It also will continue to provide information to other local newspapers, city and chambers of commerce newsletters and publications directed at water and environmental interests, the business press and the electronic media.

The WQA Board, through a variety of means, including public meetings and workshops, also interacts with the public to provide information and to solicit input. In addition, the WQA will continue to work with other agencies on information projects and participate with other water agencies on public outreach efforts.

All projects involving WQA will follow an established process, including all applicable federal, state and local regulations. Because the Basin is a Superfund site, the process will always include meeting requirements under the NCP, including its public participation component, in order to ensure maximum cost recovery potential. In addition, whenever needed or requested, WQA will work closely with water purveyors to help them meet the extensive public outreach requirements set forth in the DHS Technical Memorandum 97-005. However, absent regulatory requirements, the WQA continues to be committed to informing the public of all of its activities.

VIII. Coordination with Other Agencies

The WQA was created to fulfill a need to coordinate response actions to the contamination in the Basin. The WQA continues to call for the involved federal, state, and local agencies to unite with all stakeholders to work more effectively and efficiently. Stakeholders include but are not limited to the EPA, the USBR, the DTSC, the SWRCB, the LARWQCB, the DHS, the WQA, the Watermaster, cities affected by the Basin groundwater contamination, water purveyors in the Basin, and PRPs.

IX. Litigation Plan

The WQA Act authorizes the WQA to bring legal action, including against responsible parties to recover from them the response costs incurred in connection with removal and remedial actions in the Basin.

Among other claims the WQA can assert for cost recovery, the WQA may bring suit under CERCLA, which provides that any person or entity who owns or operates a facility from which there has been an actual or threatened release of a hazardous substance which has caused the WQA to incur response costs, is liable for the costs of response. Liability similarly is imposed on persons and entities, among others, who previously owned or operated a facility at the time such hazardous substance(s) were released.

CERCLA further allows the WQA to seek to hold all PRPs jointly and severally liable for these response costs, recover prejudgment interest, and obtain a declaration from the court that the responsible parties are liable for future response costs. In addition, the WQA may seek to recover its attorneys' fees incurred in bringing legal action. A more detailed discussion of the WQA's legal options is included in Legal Appendix C- 3.

APPENDIX I

Metropolitan's Supply Capability Tables

Table II-4
Metropolitan Regional Water Demands
Single Dry Year

Total Demands ¹	2010	2015	2020	2025	2030
A. Total Demands	5,537,000	5,742,000	5,983,000	6,203,000	6,412,000
Retail Agricultural	329,000	294,000	258,000	220,000	199,000
Retail Municipal and Industrial	4,951,000	5,186,000	5,457,000	5,715,000	5,947,000
Groundwater Replenishment	182,000	192,000	198,000	198,000	196,000
Seawater Barrier	75,000	70,000	70,000	70,000	70,000
Conservation	2010	2015	2020	2025	2030
B. Total Conservation ²	865,000	955,000	1,028,000	1,107,000	1,188,000
Existing Active (through 2004) ³	94,000	92,000	92,000	91,000	91,000
Code-based, Price-Effect, and Remaining IRP Target	521,000	613,000	686,000	766,000	847,000
Pre-1990 Conservation	250,000	250,000	250,000	250,000	250,000
Local Supplies	2010	2015	2020	2025	2030
C. Total Local Supplies	2,207,000	2,306,000	2,536,000	2,557,000	2,575,000
Groundwater	1,375,000	1,394,000	1,399,000	1,412,000	1,430,000
Surface Water	93,000	93,000	93,000	93,000	93,000
Los Angeles Aqueduct	96,000	95,000	95,000	95,000	95,000
IRP Local Resource Program Target	13,000	33,000	38,000	37,000	37,000
Groundwater Recovery	82,000	82,000	85,000	85,000	85,000
Total Recycling	329,000	351,000	376,000	377,000	377,000
Desalination	33,000	42,000	142,000	142,000	142,000
Other Imported Supplies	186,000	216,000	308,000	316,000	316,000
Demands on Metropolitan	2010	2015	2020	2025	2030
D. Total Metropolitan Demands (D=A-B-C)	2,467,000	2,479,000	2,414,000	2,536,000	2,645,000
Full Service (Tier I and Tier II)	2,224,000	2,242,000	2,186,000	2,329,000	2,462,000
Replenishment Water Rate ⁴	144,000	153,000	159,000	159,000	145,000
Interim Agricultural Water Program	99,000	84,000	69,000	48,000	38,000
Firm Demands on Metropolitan ⁵	2,293,000	2,301,000	2,234,000	2,363,000	2,489,000

Notes:
 All units are acre-feet unless specified, rounded to the nearest hundred.
 Totals may not sum due to rounding.
 (1) Growth Projections: SCAG 2004 Regional Transportation Plan, SANDAG 2030 Forecast.
 (2) The 2030 savings target is derived from the 2003 IRP Update forecast projections for 2030; it is not an official target for 2030.
 (3) Includes code-based savings originated through an active implementation program.
 (4) Replenishment Water Rate demands include seasonal shift, groundwater spreading, and groundwater in-lieu.
 (5) Firm demand on Metropolitan equals Full Service demands plus 70% of the Interim Agricultural Water Program demands.

Table II-5
Metropolitan Regional Water Demands
Multiple Dry Year

Total Demands ¹	2010	2015	2020	2025	2030
A. Total Demands	5,569,000	5,812,000	6,049,000	6,285,000	6,502,000
Retail Agricultural	331,000	297,000	262,000	226,000	202,000
Retail Municipal and Industrial	4,984,000	5,256,000	5,521,000	5,792,000	6,033,000
Groundwater Replenishment	180,000	189,000	196,000	197,000	197,000
Seawater Barrier	74,000	70,000	70,000	70,000	70,000
Conservation	2010	2015	2020	2025	2030
B. Total Conservation ²	865,000	955,000	1,028,000	1,107,000	1,188,000
Existing Active (through 2004) ³	94,000	92,000	92,000	91,000	91,000
Code-based, Price-Effect, and Remaining IRP Target	521,000	613,000	686,000	766,000	847,000
Pre-1990 Conservation	250,000	250,000	250,000	250,000	250,000
Local Supplies	2010	2015	2020	2025	2030
C. Total Local Supplies	2,178,000	2,312,000	2,545,000	2,571,000	2,577,000
Groundwater	1,378,000	1,409,000	1,412,000	1,425,000	1,431,000
Surface Water	78,000	79,000	79,000	79,000	79,000
Los Angeles Aqueduct	97,000	104,000	104,000	108,000	108,000
IRP Local Resource Program Target	13,000	33,000	38,000	37,000	37,000
Groundwater Recovery	80,000	82,000	85,000	85,000	85,000
Total Recycling	323,000	347,000	375,000	377,000	377,000
Desalination	33,000	42,000	142,000	142,000	142,000
Other Imported Supplies	176,000	216,000	310,000	318,000	318,000
Demands on Metropolitan	2010	2015	2020	2025	2030
D. Total Metropolitan Demands (D=A-B-C)	2,525,000	2,544,000	2,474,000	2,607,000	2,736,000
Full Service (Tier I and Tier II)	2,306,000	2,329,000	2,267,000	2,418,000	2,559,000
Replenishment Water Rate ⁴	119,000	130,000	136,000	137,000	137,000
Interim Agricultural Water Program	100,000	85,000	71,000	52,000	40,000
Firm Demands on Metropolitan ⁵	2,376,000	2,389,000	2,317,000	2,454,000	2,587,000

Notes:
All units are acre-feet unless specified, rounded to the nearest hundred
Totals may not sum due to rounding
(1) Growth Projections, SCAG 2004 Regional Transportation Plan, SANDAG 2030 Forecast
(2) The 2030 savings target is derived from the 2003 IRP Update forecast projections for 2030, it is not an official target for 2030.
(3) Includes code-based savings originated through an active implementation program
(4) Replenishment Water Rate demands include seasonal shift, groundwater spreading, and groundwater in-lieu
(5) Firm demand on Metropolitan equals Full Service demands plus 70% of the Interim Agricultural Water Program demands

**Table II-6
Metropolitan Regional Water Demands
Average Dry Year**

Total Demands ¹	2010	2015	2020	2025	2030
A. Total Demands	5,512,000	5,720,000	5,956,000	6,175,000	6,379,000
Retail Agricultural	319,000	285,000	251,000	215,000	195,000
Retail Municipal and Industrial	4,918,000	5,152,000	5,420,000	5,676,000	5,907,000
Groundwater Replenishment	200,000	213,000	215,000	214,000	207,000
Seawater Barrier	75,000	70,000	70,000	70,000	70,000
Conservation	2010	2015	2020	2025	2030
B. Total Conservation ²	865,000	955,000	1,028,000	1,107,000	1,188,000
Existing Active (through 2004) ³	94,000	92,000	92,000	91,000	91,000
Code-based, Price-Effect, and Remaining IRP Target	521,000	613,000	686,000	766,000	847,000
Pre-1990 Conservation	250,000	250,000	250,000	250,000	250,000
Local Supplies	2010	2015	2020	2025	2030
C. Total Local Supplies	2,411,000	2,508,000	2,734,000	2,755,000	2,754,000
Groundwater	1,416,000	1,430,000	1,431,000	1,444,000	1,442,000
Surface Water	100,000	99,000	99,000	99,000	99,000
Los Angeles Aqueduct	252,000	253,000	253,000	253,000	254,000
IRP Local Resource Program Target	13,000	33,000	38,000	37,000	37,000
Groundwater Recovery	82,000	82,000	85,000	85,000	85,000
Total Recycling	329,000	351,000	376,000	377,000	377,000
Desalination	33,000	42,000	142,000	142,000	142,000
Other Imported Supplies	186,000	218,000	310,000	318,000	318,000
Demands on Metropolitan	2010	2015	2020	2025	2030
D. Total Metropolitan Demands (D=A-B-C)	2,237,000	2,257,000	2,192,000	2,312,000	2,437,000
Full Service (Tier I and Tier II)	1,974,000	1,997,000	1,943,000	2,083,000	2,223,000
Replenishment Water Rate ⁴	169,000	180,000	183,000	183,000	177,000
Interim Agricultural Water Program	94,000	80,000	66,000	46,000	37,000
Firm Demands on Metropolitan ⁵	2,040,000	2,053,000	1,989,000	2,115,000	2,249,000

Notes
All units are acre-feet unless specified, rounded to the nearest hundred
Totals may not sum due to rounding
(1) Growth Projections: SCAG 2004 Regional Transportation Plan, SANDAG 2030 Forecast
(2) The 2030 savings target is derived from the 2003 IRP Update forecast projections for 2030, it is not an official target for 2030
(3) Includes code-based savings originated through an active implementation program
(4) Replenishment Water Rate demands include: seasonal shift, groundwater spreading, and groundwater in-lieu
(5) Firm demand on Metropolitan equals Full Service demands plus 70% of the Interim Agricultural Water Program demands

APPENDIX J
California Urban Water Conservation
Council Annual
Reports and Coverage Reports

Annual Reports for 2003 and 2004

Reported as of 9/6/05

Water Supply & Reuse

Reporting Unit:

Upper San Gabriel Valley MWD

Year:

2004**Water Supply Source Information****Supply Source Name****Quantity (AF)
Supplied****Supply
Type**Metropolitan Water District of Southern
California

61840.7

Imported

Total AF: 61840.7**Purchaser Information****Name of Agency****Quantity (AF)
Supplied****Retailer or
Wholesaler**Southern California Water Company (USG-
01 treated water)

1040.3

retail

Valley County Water District (USG-01T/09
treated water)

8114.4

retail

South Pasadena, City of (USG-02 treated
water)

123.9

retail

West Covina, City of / Suburban Water
Systems (USG-04 treated water)

12822

retail

Watermaster/Alhambra, City of (USG-05
treated water)

3058.3

retail

Arcadia, City of (USG-06 treated water)

540.5

retail

Monrovia, City of (USG-07 treated water)

0

retail

Azusa, City of (USG-08 treated water)

1975.1

retail

Main San Gabriel Basin Watermaster (USG-
03 untreated water)

33666.2

wholesale

Main San Gabriel Basin Watermaster (USG-
SGP untreated water)

500

wholesale

Main San Gabriel Basin Watermaster (USG-
48 untreated water)

0

wholesale

Main San Gabriel Basin Watermaster (USG-
0ACT1 untreated water)

0

wholesale

**Total
AF: 61840.7**

BMP 03: System Water Audits, Leak Detection and Repair

Reporting Unit:	BMP Form Status:	Year:
Upper San Gabriel Valley MWD	100% Complete	2004

A. Implementation

1. Has your agency completed a pre-screening system audit for this reporting year? no
2. If YES, enter the values (AF/Year) used to calculate verifiable use as a percent of total production:
 - a. Determine metered sales (AF)
 - b. Determine other system verifiable uses (AF)
 - c. Determine total supply into the system (AF)
 - d. Using the numbers above, if (Metered Sales + Other Verifiable Uses) / Total Supply is < 0.9 then a full-scale system audit is required. 0.00
3. Does your agency keep necessary data on file to verify the values used to calculate verifiable uses as a percent of total production? no
4. Did your agency complete a full-scale audit during this report year? no
5. Does your agency maintain in-house records of audit results or the completed AWWA audit worksheets for the completed audit? no
6. Does your agency operate a system leak detection program? no
 - a. If yes, describe the leak detection program:

B. Survey Data

1. Total number of miles of distribution system line. 0
2. Number of miles of distribution system line surveyed. 0

C. System Audit / Leak Detection Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes
 - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

USGVMWD has no distribution system so there are no water losses; making it 100% as effective as BMP 3 in ensuring the water supply system has an unaccounted water loss of less than 10%.

E. Comments

Reported as of 9/7/05

Reported as of 9/6/05

BMP 07: Public Information Programs

Reporting Unit: **Upper San Gabriel Valley MWD** BMP Form Status: **100% Complete** Year: **2004**

A. Implementation

1. Does your agency maintain an active public information program to promote and educate customers about water conservation? yes

a. If YES, describe the program and how it's organized.

USGVMWD's maintains an active public information program to promote and educate water conservation. In addition to MWDSC's public information efforts, USGVMWD offers an array of conservation brochures, children's activity booklets, public outreach displays, oral presentations and workshops. Press releases and news ads are also used to highlight water efficient projects and to raise awareness about water conservation efforts. USGVMWD's second annual WaterFest drew approximately 5,000 attendees: doubling attendance from the prior year. USGVMWD utilizes the festival to reach out to the community and raise public awareness about water conservation, water quality, and other relevant water issues.

2. Indicate which and how many of the following activities are included in your public information program.

Public Information Program Activity	Yes/No	Number of Events
a. Paid Advertising	yes	15
b. Public Service Announcement	no	
c. Bill Inserts / Newsletters / Brochures	yes	23
d. Bill showing water usage in comparison to previous year's usage	no	
e. Demonstration Gardens	no	
f. Special Events, Media Events	yes	8
g. Speaker's Bureau	yes	1
h. Program to coordinate with other government agencies, industry and public interest groups and media	yes	

B. Conservation Information Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	97000	213000
2. Actual Expenditures	143862	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

Reporting Unit:
**Upper San Gabriel Valley
MWD**

BMP Form Status:
100% Complete

Year:
2004

1. Has your agency implemented a school information program to promote water conservation? no

2. Please provide information on your school programs (by grade level):

Grade	Are grade-appropriate materials distributed?	No. of class presentations	No. of students reached	No. of teachers' workshops
Grades K-3rd				
Grades 4th-6th				
Grades 7th-8th				
High School				

3. Did your Agency's materials meet state education framework requirements? yes

4. When did your Agency begin implementing this program? 9/1/92

	This Year	Next Year
1. Budgeted Expenditures	55000	43000
2. Actual Expenditures	36260	

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

USGVMWD is a member agency of the Metropolitan Water District of Southern California (MWDSC), which has an extensive education program that offers age/grade-appropriate materials to all schools within the MWDSC territory, including all schools within USGVMWD's boundaries. MWDSC provides an active school education program that promotes water conservation and water conservation related benefits. Its educational program includes working with school districts and private schools within its boundaries to: provide instructional assistance, educational materials, and classroom presentations that identify urban, agricultural, and environmental issues and conditions in the local watershed. MWDSC's educational materials meet state education framework requirements and are grade appropriate materials that are offered to all grade levels K - 12th. USGVMWD is a member agency of MWDSC, therefore, all schools within USGVMWD's boundaries are covered under MWDSC's educational program, making it 100% as effective as BMP 8 in ensuring a viable education program with no direct cost contribution from USGVMWD. Since the educational program is

handled by MWDSC, it is MWDSC who documents and reports on: a) Number of school presentations made during reporting period. b) Number and type of curriculum materials developed and/or provided by water supplier, including confirmation that curriculum materials meet state education framework requirements and are grade-level appropriate. c) Number of students reached. d) Number of in-service presentations or teacher's workshops conducted during reporting period. e) Annual budget for school education programs related to conservation. In addition to MWDSC's educational program, USGVMWD directly offered the following school education programs: ~ Water Awareness Art Contests - In an effort to raise awareness of water issues among children, USGVMWD sponsors an annual poster art contests for grades K - 3rd and 4th - 6th. The five winning posters for each category receive monetary awards and are printed into sheets of stickers. These 10 winning posters are then submitted as USGVMWD's entries in MWDSC's poster art contest. USGVMWD also sponsors a t-shirt art contest for grades 7th - 12th in which the top five selections receive monetary awards, with the top two designs printed onto t-shirts and the top five entries submitted to MWDSC's upper grade art contest. A total of 164 entries were received for the 2003 art contest. ~ Solar Cup Competition - USGVMWD sponsored one high school team in MWDSC's Solar Competition, which provides high school students the opportunity to build solar powered boat that compete in race and endurance categories. The program offers student participants an opportunity to learn about natural resources, the development/use of alternative fuel sources and protection of water quality. ~ Water Resource Library - USGVMWD also maintains an onsite library offering a variety of current water education materials for all ages. Resources available for loan include activity books, textbooks, videotapes and computer software. These educational resources are different than the materials offered through MWDSC's educational program, giving local schools access to a wider range of water education resources.

D. Comments

Reported as of 9/7/05

Reported as of 9/6/05

BMP 10: Wholesale Agency Assistance Programs

Reporting Unit: **Upper San Gabriel Valley MWD** BMP Form Status: **100% Complete** Year: **2004**

A. Implementation**1. Financial Support by BMP**

BMP	Financial Incentives Offered?	Budgeted Amount	Amount Awarded	BMP	Financial Incentives Offered?	Budgeted Amount	Amount Awarded
1	No			8	No		
2	No			9	No		
3	No			10	No		
4	No			11	No		
5	No			12	No		
6	No			13	No		
7	No			14	No		

2. Technical Support

- | | |
|---|-----|
| a. Has your agency conducted or funded workshops addressing CUWCC procedures for calculating program savings, costs and cost-effectiveness? | No |
| b. Has your agency conducted or funded workshops addressing retail agencies' BMP implementation reporting requirements? | No |
| c. Has your agency conducted or funded workshops addressing: | |
| 1) ULFT replacement | No |
| 2) Residential retrofits | No |
| 3) Commercial, industrial, and institutional surveys | No |
| 4) Residential and large turf irrigation | yes |
| 5) Conservation-related rates and pricing | No |

3. Staff Resources by BMP

BMP	Qualified Staff Available for BMP?	No. FTE Staff Assigned to BMP	BMP	Qualified Staff Available for BMP?	No. FTE Staff Assigned to BMP
1	No		8	yes	.1
2	No		9	No	
3	No		10	yes	.25
4	No		11	No	
5	No		12	yes	.5
6	yes	1	13	No	
7	yes	.15	14	No	

4. Regional Programs by BMP

BMP	Implementation/ Management Program?	BMP	Implementation/ Management Program?
1	No	8	yes
2	No	9	yes
3	No	10	yes
4	No	11	No
5	No	12	yes
6	yes	13	No
7	yes	14	yes

B. Wholesale Agency Assistance Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	1368000	913000
2. Actual Expenditures	570991	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

During the FY 2003-04, USGVMWD provided further regional assistance to its water purveyors by implementing/continuing the following conservation programs. CII Financial Incentive Retrofit Program The CII conservation program offers commercial, industrial, and institutional facilities, within District boundaries, rebates for retrofitting several types of high water-use fixtures/equipment with efficient water-use fixtures/equipment. The Program provides financial incentives in the following categories: ULFTs (both tank-type and flushometer), ULF urinals, Flush-valve kits, pre-rinse spray heads with self-closing valves, cooling tower conductivity controller installations/retrofits, high-efficiency commercial clothes washers, water pressurized brooms, and hospital x-ray processor recirculating systems. Retrofits conducted during the FY 2002-03 are estimated to result in 47.62 acre feet of water saved per year, or 429.25 acre feet for a lifetime savings. Ultra Low Flush Toilets (ULFTS) The ULFT giveaway program utilized a local school to assist in implementing the program in conjunction with the City of Azusa. Eligible residents, living within the Upper District boundaries, were eligible to receive up to two (2) ULFTs per household free of charge. 301 Ultra Low Flush Toilets (ULFTs) were distributed by USGVMWD, which will result in 10.23 acre feet per year, or 102.31 acre-feet lifetime savings. High Efficiency Clothes Washers (HECW) Retrofit Program Rebates for 1,150 HECWs were provided during the FY 2003-04 and are estimated to result in a total water savings of 24.70 acre feet per year, or 370.57 acre-feet over a fifteen-year product lifespan. Approximately 800 low flow showerheads and 3,000 aerators were also distributed throughout the FY 03-04, estimated to save 18.03 acre feet of lifetime water savings. As a member agency of the Metropolitan Water District of Southern California's (MWDSC), USGVMWD is able to combine MWDSC's programs and services with its own conservation program to provide effective Wholesale Agency Assistance for local water retailers. MWDSC offers staff, resources and workshops to assist with technical, programmatic, strategic or other pertinent issues and developments associated with water conservation activities in areas such as: ULFT replacement; residential retrofits; commercial, industrial and institutional surveys; residential and large turf irrigation; and conservation-related rates and pricing; BMP reporting. USGVMWD's conservation efforts are supplemented by MWDSC's conservation program, making it 100% at least as effective as BMP 10.

D. Comments

BMP 11: Conservation Pricing

BMP Form
Status:
100% Complete

Year:
2004

Rate Structure Data Volumetric Rates for Water Service by Customer Class

a. Water Rate Structure	Service Not Provided
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	\$0
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$0

a. Water Rate Structure

b. Sewer Rate Structure

c. Total Revenue from Volumetric Rates \$

d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue \$

Sources

a. Water Rate Structure

b. Sewer Rate Structure

c. Total Revenue from Volumetric Rates \$

d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue \$

Sources

a. Water Rate Structure

b. Sewer Rate Structure

c. Total Revenue from Volumetric Rates \$

d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue \$

Sources

a. Water Rate Structure

b. Sewer Rate Structure

c. Total Revenue from Volumetric Rates \$

d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue \$

Sources

a. Water Rate Structure

b. Sewer Rate Structure

c. Total Revenue from Volumetric Rates \$

d. Total Revenue from Non-Volumetric
Charges, Fees and other Revenue \$
Sources

B. Conservation Pricing Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as"
variant of this BMP? No

a. If YES, please explain in detail how your implementation of this
BMP differs from Exhibit 1 and why you consider it to be "at least as
effective as."

D. Comments

Reported as of 9/6/05

BMP 12: Conservation Coordinator

Reporting Unit:	BMP Form Status:	Year:
Upper San Gabriel Valley MWD	100% Complete	2004

A. Implementation

1. Does your Agency have a conservation coordinator? yes
2. Is this a full-time position? yes
3. If no, is the coordinator supplied by another agency with which you cooperate in a regional conservation program ? no
4. Partner agency's name:
5. If your agency supplies the conservation coordinator:
 - a. What percent is this conservation coordinator's position? 90%
 - b. Coordinator's Name Elena Layugan
 - c. Coordinator's Title Conservation Coordinator
 - d. Coordinator's Experience and Number of Years 12 Years
 - e. Date Coordinator's position was created (mm/dd/yyyy) 09/01/1992
6. Number of conservation staff, including Conservation Coordinator. 1

B. Conservation Staff Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	160000	180700
2. Actual Expenditures	259808	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no
 - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

Budgeted Expenditures includes overhead and benefits for Conservation Coordinator. Also includes: Time and resources used by other staff for any conservation-related programs. Hiring of any temporary staff for specific conservation programs and/or events.

Reported as of 9/6/05

Water Supply & Reuse

Reporting Unit:

Upper San Gabriel Valley MWD

Year:

2003**Water Supply Source Information**

Supply Source Name	Quantity (AF) Supplied	Supply Type
Metropolitan Water District of Southern California	62325.4	

Total AF: 62325.4**Purchaser Information**

Name of Agency	Quantity (AF) Supplied	Retailer or Wholesaler
Southern California Water Company (USG-01 treated water)	391.9	retail
Valley County Water District (USG-01T/09 treated water)	529.7	retail
South Pasadena, City of (USG-02 treated water)	607.5	retail
West Covina, City of / Suburban Water Systems (USG-04 treated water)	14038.7	retail
Watermaster/Alhambra, City of (USG-05 treated water)	3018.3	retail
Arcadia, City of (USG-06 treated water)	0	retail
Monrovia, City of (USG-07 treated water)	.1	retail
Azusa, City of (USG-08 treated water)	2100.3	retail
Main San Gabriel Basin Watermaster (USG-03 untreated water)	41638.9	wholesale
Main San Gabriel Basin Watermaster (USG-48 untreated water)	0	wholesale
Main San Gabriel Basin Watermaster (USG-0ACT1 untreated water)	0	wholesale
Main San Gabriel Basin Watermaster (USG-SGP untreated water)	0	wholesale

Total
AF: 62325.4

Reported as of 9/7/05

Reported as of 9/6/05

BMP 07: Public Information Programs

Reporting Unit: **Upper San Gabriel Valley MWD** BMP Form Status: **100% Complete** Year: **2003**

A. Implementation

1. Does your agency maintain an active public information program to promote and educate customers about water conservation? yes

a. If YES, describe the program and how it's organized.

USGVMWD's maintains an active public information program to promote and educate water conservation. In addition to MWDSC's public information efforts, USGVMWD offers an array of conservation brochures, children's activity booklets, public outreach displays, oral presentations and workshops. Press releases and news ads are also used to highlight water efficient projects and to raise awareness about water conservation efforts. USGVMWD also launched a new event called WaterFest, which drew approximately 2,500 attendees. The festival provided a wonderful opportunity to raise public awareness about water conservation, water quality, and other relevant water issues.

2. Indicate which and how many of the following activities are included in your public information program.

Public Information Program Activity	Yes/No	Number of Events
a. Paid Advertising	yes	15
b. Public Service Announcement	no	
c. Bill Inserts / Newsletters / Brochures	yes	23
d. Bill showing water usage in comparison to previous year's usage	no	
e. Demonstration Gardens	no	
f. Special Events, Media Events	yes	7
g. Speaker's Bureau	yes	2
h. Program to coordinate with other government agencies, industry and public interest groups and media	yes	

B. Conservation Information Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	113500	97000
2. Actual Expenditures	116775	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

BMP 08: School Education Programs

Reporting Unit:
**Upper San Gabriel Valley
 MWD**

BMP Form Status:
100% Complete

Year:
2003

A. Implementation

1. Has your agency implemented a school information program to promote water conservation? no

2. Please provide information on your school programs (by grade level):

Grade	Are grade-appropriate materials distributed?	No. of class presentations	No. of students reached	No. of teachers' workshops
-------	--	----------------------------	-------------------------	----------------------------

Grades K-3rd

Grades 4th-6th

Grades 7th-8th

High School

3. Did your Agency's materials meet state education framework requirements? yes

4. When did your Agency begin implementing this program? 9/1/92

B. School Education Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	45000	55000
2. Actual Expenditures	21398	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

USGVMWD is a member agency of the Metropolitan Water District of Southern California (MWDSC), which has an extensive education program that offers age/grade-appropriate materials to all schools within the MWDSC territory, including all schools within USGVMWD's boundaries. MWDSC provides an active school education program that promotes water conservation and water conservation related benefits. Its educational program includes working with school districts and private schools within its boundaries to: provide instructional assistance, educational materials, and classroom presentations that identify urban, agricultural, and environmental issues and conditions in the local watershed. MWDSC's educational materials meet state education framework requirements and are grade appropriate materials that are offered to all grade levels K - 12th. USGVMWD is a member agency of MWDSC, therefore, all schools within USGVMWD's boundaries are covered under MWDSC's educational program, making it 100% as effective as BMP 8 in ensuring a viable education program with no direct cost contribution from USGVMWD. Since the educational program is

handled by MWDSC, it is MWDSC who documents and reports on: a) Number of school presentations made during reporting period. b) Number and type of curriculum materials developed and/or provided by water supplier, including confirmation that curriculum materials meet state education framework requirements and are grade-level appropriate. c) Number of students reached. d) Number of in-service presentations or teacher's workshops conducted during reporting period. e) Annual budget for school education programs related to conservation. In addition to MWDSC's educational program, USGVMWD directly offered the following school education programs: ~ Water Awareness Art Contests ~ In an effort to raise awareness of water issues among children, USGVMWD sponsors an annual poster art contests for grades K - 3rd and 4th - 6th. The five winning posters for each category receive monetary awards and are printed into sheets of stickers. These 10 winning posters are then submitted as USGVMWD's entries in MWDSC's poster art contest. USGVMWD also sponsors a t-shirt art contest for grades 7th - 12th in which the top five selections receive monetary awards, with the top two designs printed onto t-shirts and the top five entries submitted to MWDSC's upper grade art contest.. A total of 173 entries were received for the 2003 art contest. ~ Water Resource Library ~ USGVMWD also maintains an onsite library offering a variety of current water education materials for all ages. Resources available for loan include activity books, textbooks, videotapes and computer software. These educational resources are different than the materials offered through MWDSC's educational program, giving local schools access to a wider range of water education resources.

D. Comments

Reported as of 9/7/05

Reported as of 9/6/05

BMP 10: Wholesale Agency Assistance Programs

Reporting Unit: **Upper San Gabriel Valley MWD** BMP Form Status: **100% Complete** Year: **2003**

A. Implementation**1. Financial Support by BMP**

BMP	Financial Incentives Offered?	Budgeted Amount	Amount Awarded	BMP	Financial Incentives Offered?	Budgeted Amount	Amount Awarded
1	No			8	No		
2	No			9	No		
3	No			10	No		
4	No			11	No		
5	No			12	No		
6	No			13	No		
7	No			14	No		

2. Technical Support

-
- a. Has your agency conducted or funded workshops addressing CUWCC procedures for calculating program savings, costs and cost-effectiveness? No
- b. Has your agency conducted or funded workshops addressing retail agencies' BMP implementation reporting requirements? No
- c. Has your agency conducted or funded workshops addressing:
- 1) ULFT replacement No
 - 2) Residential retrofits No
 - 3) Commercial, industrial, and institutional surveys No
 - 4) Residential and large turf irrigation yes
 - 5) Conservation-related rates and pricing No

3. Staff Resources by BMP

BMP	Qualified Staff Available for BMP?	No. FTE Staff Assigned to BMP	BMP	Qualified Staff Available for BMP?	No. FTE Staff Assigned to BMP
1	No		8	yes	.1
2	No		9	No	
3	No		10	yes	.25
4	No		11	No	
5	No		12	yes	.5
6	yes	1	13	No	
7	yes	.15	14	No	

4. Regional Programs by BMP

BMP	Implementation/ Management Program?	BMP	Implementation/ Management Program?
1	No	8	yes
2	No	9	yes
3	No	10	yes
4	No	11	No
5	yes	12	yes
6	yes	13	No
7	yes	14	No

B. Wholesale Agency Assistance Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	485000	1368000
2. Actual Expenditures	717688	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

During the FY 2002-03, USGVMWD provided further regional assistance to its water purveyors by implementing/continuing the following conservation programs. CII Financial Incentive Retrofit Program The CII conservation program offers commercial, industrial, and institutional facilities, within District boundaries, rebates for retrofitting several types of high water-use fixtures/equipment with efficient water-use fixtures/equipment. The Program provides financial incentives in the following categories: ULFTs (both tank-type and flushometer), ULF urinals, Flush-valve kits, pre-rinse spray heads with self-closing valves, cooling tower conductivity controller installations/retrofits, high-efficiency commercial clothes washers, water pressurized brooms, and hospital x-ray processor recirculating systems. Retrofits conducted during the FY 2002-03 are estimated to result in 27.67 acre feet of water saved per year, or 322.84 acre feet for a lifetime savings. High Efficiency Clothes Washers (HECW) Retrofit Program Rebates for 1,125 HECWs were provided during the FY 2002-03 and are estimated to result in a total water savings of 24.17 acre feet per year, or 362.51 acre-feet over a fifteen-year product lifespan. Olive Sportspark Water Efficient Landscape Project The Olive Sportspark Water Efficient Landscape Project implemented during the FY 02-03 is estimated to result in 8 acre feet saved annually, or 40 acre feet (based on 5 years) of lifetime savings. Total tangible water savings for the above projects implemented during FY 2002-03 is estimated to result in 59.84 saved annually, or 725.35 acre feet of lifetime savings. As a member agency of the Metropolitan Water District of Southern California's (MWDSC), USGVMWD is able to combine MWDSC's programs and services with its own conservation program to provide effective Wholesale Agency Assistance for local water retailers. MWDSC offers staff, resources and workshops to assist with technical, programmatic, strategic or other pertinent issues and developments associated with water conservation activities in areas such as: ULFT replacement; residential retrofits; commercial, industrial and institutional surveys; residential and large turf irrigation; and conservation-related rates and pricing; BMP reporting. USGVMWD's conservation efforts are supplemented by MWDSC's conservation program, making it 100% at least as effective as BMP 10.

D. Comments

The temporary staff person that was retained to work full-time on USGVMWD's High Efficiency Clothes Washer (HECW) Rebate Program became a full-time employee and continued to handle most of the HECW Rebate Program.

Reported as of 9/6/05

BMP 11: Conservation Pricing

Reporting Unit:
Upper San Gabriel Valley MWD

BMP Form
 Status:
100% Complete

Year:
2003

A. Implementation

Rate Structure Data Volumetric Rates for Water Service by Customer Class

1. Residential

- a. Water Rate Structure Service Not Provided
 - b. Sewer Rate Structure Service Not Provided
 - c. Total Revenue from Volumetric Rates \$0
 - d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue \$0
- Sources

2. Commercial

- a. Water Rate Structure
 - b. Sewer Rate Structure
 - c. Total Revenue from Volumetric Rates \$
 - d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue \$
- Sources

3. Industrial

- a. Water Rate Structure
 - b. Sewer Rate Structure
 - c. Total Revenue from Volumetric Rates \$
 - d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue \$
- Sources

4. Institutional / Government

- a. Water Rate Structure
 - b. Sewer Rate Structure
 - c. Total Revenue from Volumetric Rates \$
 - d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue \$
- Sources

5. Irrigation

- a. Water Rate Structure
 - b. Sewer Rate Structure
 - c. Total Revenue from Volumetric Rates \$
 - d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue \$
- Sources

6. Other

- a. Water Rate Structure

- b. Sewer Rate Structure
- c. Total Revenue from Volumetric Rates \$
- d. Total Revenue from Non-Volumetric
Charges, Fees and other Revenue \$
Sources

B. Conservation Pricing Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

- 1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No
 - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

Reported as of 9/6/05

BMP 12: Conservation Coordinator

Reporting Unit:	BMP Form Status:	Year:
Upper San Gabriel Valley MWD	100% Complete	2003

A. Implementation

1. Does your Agency have a conservation coordinator? yes
2. Is this a full-time position? yes
3. If no, is the coordinator supplied by another agency with which you cooperate in a regional conservation program ? no
4. Partner agency's name:
5. If your agency supplies the conservation coordinator:
 - a. What percent is this conservation coordinator's position? 90%
 - b. Coordinator's Name Elena Layugan
 - c. Coordinator's Title Conservation Coordinator
 - d. Coordinator's Experience and Number of Years 11 Years
 - e. Date Coordinator's position was created (mm/dd/yyyy) 09/01/1992
6. Number of conservation staff, including Conservation Coordinator. 1

B. Conservation Staff Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	157400	160000
2. Actual Expenditures	190178	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no
 - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

Budgeted Expenditures includes overhead and benefits for Conservation Coordinator. Also includes: Time and resources used by other staff for any conservation-related programs. Hiring of any temporary staff for specific conservation programs and/or events.

Coverage Reports
Reporting Period: 2003-04

BMP 03 Coverage: System Water Audits, Leak Detection and Repair

Reporting Unit:
Upper San Gabriel Valley MWD

Reporting Period:
03-04

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period?

Yes

An agency must meet one of two conditions to be in compliance with BMP 3:

Condition 1: Perform a prescreening audit. If the result is equal to or greater than 0.9 nothing more needs be done.

Condition 2: Perform a prescreening audit. If the result is less than 0.9, perform a full audit in accordance with AWWA's Manual of Water Supply Practices, Water Audits, and Leak Detection.

Test for Conditions 1 and 2

<u>Report Year</u>	<u>Report Period</u>	<u>Pre-Screen Completed</u>	<u>Pre-Screen Result</u>	<u>Full Audit Indicated</u>	<u>Full Audit Completed</u>
1999	99-00	NO			NO
2000	99-00	NO			NO
2001	01-02	NO			NO
2002	01-02	NO			NO
2003	03-04	NO			NO
2004	03-04	NO			NO

BMP 3 COVERAGE STATUS SUMMARY:

Water supplier has not met one or more coverage requirements for this BMP.

Reported as of 9/6/05

BMP 07 Coverage: Public Information Programs

Reporting Unit:

Reporting Period:

Upper San Gabriel Valley MWD**03-04****MOU Exhibit 1 Coverage Requirement**

No exemption request filed

Agency indicated "at least as effective as" implementation during report period?

No

An agency must meet one condition to comply with BMP 7.

Condition 1: Implement and maintain a public information program consistent with BMP 7's definition.

Test for Condition 1

<u>Year</u>	<u>Report Period</u>	<u>BMP 7 Implementation Year</u>	<u>RU Has Public Information Program?</u>
1999	99-00	2	YES
2000	99-00	3	YES
2001	01-02	4	YES
2002	01-02	5	YES
2003	03-04	6	YES
2004	03-04	7	YES

BMP 7 COVERAGE STATUS SUMMARY:**Water supplier is meeting coverage requirements for this BMP.**

BMP 08 Coverage: School Education Programs

Reporting Unit:

Upper San Gabriel Valley MWD

Reporting Period:

03-04**MOU Exhibit 1 Coverage Requirement**

No exemption request filed

Agency indicated "at least as effective as" implementation during report period?

Yes

An agency must meet one condition to comply with BMP 8.

Condition 1: Implement and maintain a school education program consistent with BMP 8's definition.

Test for Condition 1

<u>Year</u>	<u>Report Period</u>	<u>BMP 8 Implementation Year</u>	<u>RU Has School Education Program?</u>
1999	99-00	2	NO
2000	99-00	3	NO
2001	01-02	4	NO
2002	01-02	5	NO
2003	03-04	6	NO
2004	03-04	7	NO

BMP 8 COVERAGE STATUS SUMMARY:**Water supplier has not met one or more coverage requirements for this BMP.**

Reported as of 9/6/05

BMP 11 Coverage: Conservation Pricing

Reporting Unit:

Upper San Gabriel Valley MWD

Reporting Period:

03-04**MOU Exhibit 1 Coverage Requirement**

No exemption request filed

Agency indicated "at least as effective as" implementation during report period?

No

An agency must meet one condition to comply with BMP 11.

Agency shall maintain rate structure consistent with BMP 11's definition of conservation pricing. Implementation methods shall be at least as effective as eliminating non-conserving pricing and adopting conserving pricing. For signatories supplying both water and sewer service, this BMP applies to pricing of both water and sewer service. Signatories that supply water but not sewer service shall make good faith efforts to work with sewer agencies so that those sewer agencies adopt conservation pricing for sewer service.

a) Non-conserving pricing provides no incentives to customers to reduce use. Such pricing is characterized by one or more of the following components: rates in which the unit price decreases as the quantity used increases (declining block rates); rates that involve charging customers a fixed amount per billing cycle regardless of the quantity used; pricing in which the typical bill is determined by high fixed charges and low commodity charges.

b) Conservation pricing provides incentives to customers to reduce average or peak use, or both. Such pricing includes: rates designed to recover the cost of providing service; and billing for water and sewer service based on metered water use. Conservation pricing is also characterized by one or more of the following components: rates in which the unit rate is constant regardless of the quantity used (uniform rates) or increases as the quantity used increases (increasing block rates); seasonal rates or excess-use surcharges to reduce peak demands during summer months; rates based upon the longrun marginal cost or the cost of adding the next unit of capacity to the system.

Test for Condition 1

<u>Year</u>	<u>Report Period</u>	<u>RU Employed Non Conserving Rate Structure</u>	<u>RU Meets BMP 11 Coverage Requirement</u>
1999	99-00	NO	YES
2000	99-00	NO	YES
2001	01-02	NO	YES
2002	01-02	NO	YES
2003	03-04	NO	YES
2004	03-04	NO	YES

BMP 11 COVERAGE STATUS SUMMARY:**Water supplier is meeting coverage requirements for this BMP.**

Reported as of 9/6/05

BMP 12 Coverage: Conservation Coordinator

Reporting Unit:
Upper San Gabriel Valley MWD

Reporting Period:
03-04

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period? No

Agency shall staff and maintain the position of conservation coordinator and provide support staff as necessary.

Test for Compliance

<u>Report Year</u>	<u>Report Period</u>	<u>Conservation Coordinator Position Staffed?</u>	<u>Total Staff on Team (incl. CC)</u>
1999	99-00	YES	1
2000	99-00	YES	1
2001	01-02	YES	1
2002	01-02	YES	1
2003	03-04	YES	1
2004	03-04	YES	1

BMP 12 COVERAGE STATUS SUMMARY:
Water supplier is meeting coverage requirements for this BMP.

APPENDIX K
Upper San Gabriel Valley
Municipal Water District's
Rate Schedule Resolution

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

RESOLUTION NO. 12-04-430

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE
UPPER SAN GABRIEL VALLEY MUNICIPAL WATER
DISTRICT REPEALING RESOLUTION NO. 12-03-421 AND
ADOPTING WATER RATES AND CHARGES FOR
CALENDAR YEAR 2005**

WHEREAS, the Metropolitan Water District of Southern California ("MWD" herein) has adopted water rates and charges for its classes and conditions of service for the calendar year 2005 and this Upper San Gabriel Valley Municipal Water District ("Upper District" herein) wishes to reflect MWD's new rates and charges in the water rates and charges of the Upper District; and

WHEREAS, MWD has established charges in their rate structure including a Readiness-to-Serve Charge, Capacity Charge, Tier 1 and 2 commodity charges; and

WHEREAS, Upper District requested that MWD continue its Standby Charge in Upper District's service area with the intention that the above referenced Readiness-to-Serve charge be paid from the funds generated from said Standby Charge for calendar year 2005; and

WHEREAS, during Fiscal year 1991/92 Upper District entered into an agreement with MWD for the enlargement of the discharge valve on Service Connection USG-3. As part of this agreement, MWD will charge Upper District an additional \$2.00 per acre foot for all water delivered through this enlarged discharge valve. It is the intention of Upper District to incorporate this \$2.00 per acre foot charge into the rate established for delivery through Service Connection USG-3; and

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT as follows:

Section 1. Resolution No. 12-03-421 adopted December 9, 2003, is hereby repealed.

Section 2. Effective January 1, 2005, the following water rates are established and will remain effective through December 31, 2005:

Class of Service	Rate per Acre Foot
Full Service – Treated (Tier 1)	\$484.23
Full Service – Treated (Tier 2)	\$569.28
Groundwater Replenishment Service – Untreated	\$246.65
Long-Term Cyclic Storage Service	\$125.65
Recycled Water Service	By Contract
Excess Annual Capacity Charge	\$6,800 per CFS
Minimum Service Connection Charge (per year)	\$680

1 Section 3. Description of Service Classes:

2 Full Service Treated (Tier 1)

3 For Calendar Year 2005 the Upper District has an allotment of Treated Tier 1 supply of 16,511.6 acre feet
4 at a rate of \$484.23 per acre foot. That fixed supply will be equitably allocated to all treated water service
5 connections at the end of Calendar Year 2005. Service connections utilizing supply exceeding the
6 aforementioned allocation will be subject to Tier 2 charges.

7 Full Service Treated (Tier 2)

8 For Calendar Year 2005, the Upper District will have an unlimited allotment (subject to drought
9 restrictions) of Treated Tier 2 supply. Once the total allotment of Treated Tier 1 supply is utilized, all
10 treated water sold will be at the Tier 2 rate of \$569.28 per acre-foot for the remainder of the calendar year.

11 Excess Annual Capacity Charges

12 The Tier 1 rate of \$484.23 per acre foot as well as the Treated Tier 2 rate of \$569.28 per acre foot assumes
13 a annual maximum daily average capacity usage* per acre foot of 0.002 cubic feet per second. Sub-
14 agencies that exceed the 0.002 CFS/AF threshold will be subject to annual excess capacity charges. Excess
15 capacity charges will be calculated as \$6,800 for each CFS of excess capacity utilized during the period of
16 May through September 2005 and will apply for three years.

17 Groundwater Replenishment Service (Untreated)

18 The rate for untreated groundwater replenishment service will be \$246.65 per acre foot. This service will
19 be provided at service connection USG-3 and be subject to supply availability as determined by the
20 Metropolitan Water District. The timing and rate of delivery (CFS) for this service shall also be subject to
21 operating restrictions imposed by the Los Angeles County Department of Public Works.

22 Long-Term Cyclic Storage Service-Pilot Program

23 The pilot program offers incentives to District sub-agencies to maintain long-term cyclic storage accounts
24 in the Basin. The purpose of this program is to assist in maintaining the Basin groundwater elevation at
25 optimum levels and creating supply reserves for drought protection. This program also provides sub-
26 agencies with an economic incentive for meeting peak demands with groundwater and other local sources
27 rather than treated imported water service. This will help prevent excessive capacity charges and Tier 2
28 penalties from MWD.

* May through September only.

1 The proposed price discount of \$121.00 per acre foot is the approximate savings realized when excessive
2 capacity charges and Tier 2 penalties are avoided. This service will be provided at service connection
3 USG-3 and be subject to supply availability as determined by the Metropolitan Water District. The timing
4 and rate of delivery (CFS) for this service shall also be subject to operating restrictions imposed by the Los
5 Angeles County Department of Public Works.

6 The proposed terms of this pilot program are as follows:

- 7 1. The Upper District Board of Directors will establish an amount of replenishment water available
8 each year for the program. (7,500 acre feet for Calendar Year 2005)
- 9 2. Water will be offered only to Upper District sub-agencies at a discounted rate of \$125.65 per acre
10 foot and used to meet future demands and replacement water obligations.
- 11 3. Should available program water be oversubscribed, an equitable allocation formula will be
12 established utilizing such factors as water rights, total groundwater production, and replacement
13 water requirements. Actual circumstances may dictate that other factors be considered to ensure
14 equity.
- 15 4. Storage requirements will be as much as five years but under no circumstances be less than one
16 year.
- 17 5. Annually, Watermaster will determine usage of long-term cyclic storage reserves that have
18 satisfied the minimum storage requirements, taking into account groundwater basin conditions,
19 general hydrological conditions, rainfall and other factors.
- 20 6. Watermaster will provide the District an annual accounting of cyclic storage deliveries and
21 usage.
- 22 7. Upper District sub-agencies may participate in this program only after current replacement water
23 obligations have been satisfied.
- 24 8. The Upper District Board will annually review the effectiveness of the program, making any
25 changes necessary to ensure that program goals are achieved.

26 Section 4. Treated Water Rate Model:

27 The District has prepared a treated water rate model for the period 2004 through 2009. The model includes
28 forecasted treated water demands, anticipated costs, probable water rates, expected cost recovery and a
reasonable application of rate stabilization funds. Future actual costs and rates may vary from those
presented in the model. However, the model offers a reasonable budgeting and planning tool for the
District and its sub-agencies. The Board will periodically review the model to validate or modify
assumptions to provide for the most rational projection of future costs and rates possible. The model
presented in Exhibit A is incorporated herein by reference.

1 Section 5. Each groundwater replenishment customer shall pay a monthly ready-to-serve charge in
2 addition to the water rate for groundwater replenishment service. This monthly ready-to-serve charge will
3 be \$42.00 for each cubic foot per second of groundwater replenishment service connection capacity, at an
4 amount not-to-exceed \$6,300.00 per month, payable in advance.

5 Section 6. A minimum charge equivalent to ten percent (10%) or one-tenth (1/10) of the value of
6 one CFS of capacity (\$6,800), which equals \$680 for calendar year 2005, will be billed to the sub-agencies
7 prorated on a monthly basis irrespective of the amount of water used.

8 Section 7. All sales, deliveries and availability of water at the rates established herein shall be
9 subject to the ability of the Upper District to sell, deliver and make available such water under operating
10 conditions determined by the General Manager of Upper District and of MWD, and subject to the water
11 service regulations of Upper District and of MWD. All agencies that purchase treated water must comply
12 with all rules, requirements, and regulations of Upper District Urban Water Management Plan adopted on
13 or about September 2000 and any amendments or supplements thereto.

14 Section 8. The Board of Directors finds that the water rates and charges established herein will
15 result in a fair and equitable revenue source to partially fund budgeted expenditures, thereby reasonably
16 allocating costs of service to those who benefit therefrom.

17 Section 9. The Secretary of Upper District shall cause a copy of this Resolution to be mailed to all
18 current purchasers of water from Upper District including the users of water replenishment service
19 connections.


20 Section 10. Resolution No. 12-03-421 is hereby repealed.

21 PASSED, APPROVED AND ADOPTED this 14TH day of December, 2004.

22
23
24 ATTEST

25
26 
27 SECRETARY

28 SEAL


PRESIDENT

APPENDIX L
Upper San Gabriel Valley
Municipal Water District's
DMM Information

Large Landscape Conservation Programs



CONSERVATION



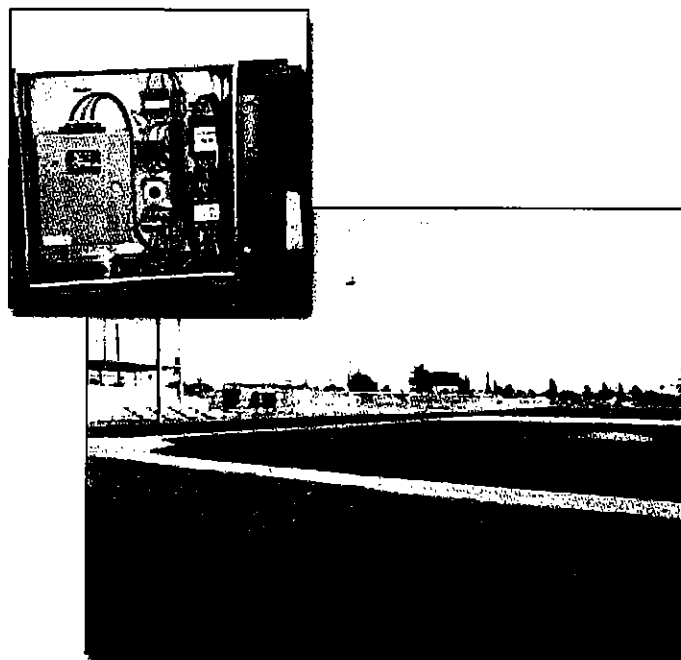
Olive Middle School Sports Park Model Water Efficient Landscape Project

The Upper San Gabriel Valley Municipal Water District (Upper District) plans to embark on Phase II of retrofitting the irrigation system of the Olive Middle School Sports Park, located just north of Olive Middle School in Baldwin Park. The Sports Park consists of three baseball diamonds and one softball diamond and is currently administered and maintained by the Baldwin Park Little League.

Volunteers installed the current irrigation system, which is manually operated, over fifteen years ago. On occasion fields have been flooded or left very dry and leakage has remained a constant problem throughout the years. A new automated irrigation system would greatly increase the efficiency of the system and maintain a viable water efficient landscape.

Phase I included installation of all new irrigation piping, a booster pump, controls, ground leveling and seeding for the two largest fields (Fields 1 and 2). Construction for Phase I is near completion and the fields will be ready by the end of March 2003 in time for use during the Little League's upcoming 2003 season.





Design and construction of the project is underway in order to meet the proposed goal of completing all fields for use in the Little League's 2004 season. The design includes new irrigation piping, a water meter to measure irrigation consumption, a booster pump to increase water pressures, automated controller clocks, an evapotranspiration tracking (Et0) system, moisture sensing, rain shut-off, addition of soil amendments, leveling out irregularities in fields, and placement of new turf. One of the BATs for irrigation installations includes Et0 tracking which consists of daily communication with local weather stations that reports daily evapotranspiration rates. This information is then input into the irrigation system's controllers, which automatically adjusts the amount of water to be applied to the fields. These daily automatic adjustments based on current weather conditions will allow the system to conserve water in the most efficient manner.

In Phase II, the Upper District proposes retrofitting the irrigation system of Fields 3 and 4 using new "Best Available Technology" (BAT) in order to increase water efficiency for this community Sports Park. This model project incorporates state-of-the-art irrigation technology that provides a showcase for the demonstration of improvements in water efficiency that can be achieved with new technologies. Upper District has asked Stetson Engineers to head up the design of the project. Stetson Engineers will be working with the Water Management Group (irrigation specialists) and RHA Landscape Architects Planners to design the new system and overlying turf.

Work during Phase II includes installation of all new irrigation piping, controllers, ground leveling and seeding for the remaining two fields (Fields 3 and 4). Construction for Phase II is proposed to begin in July 2003 and the fields would be ready for use by the end of November

2003. When completed, the project is expected to yield a long-term water conservation benefit of 30% to 40%.

Protector del Agua: Professional

Course Description

The course consists of four consecutive classes in landscape water management, each building upon principles presented in the preceding class. Protector del Agua begins with basic irrigation principles of soil-plant-water relationships, and concludes with irrigation scheduling. Each participant receives a bound reference handbook and a certificate of completion at the end of the course listing all classes completed. The following is a synopsis of each class in the course:

- 1. Irrigation Principles:** This comprehensive class covers the basic principles of landscape irrigation, which will provide a solid foundation for sound landscape water management. At the conclusion of this class, the participants will have attained, through lecture and classroom demonstrations, a practical knowledge of landscape irrigation design, installation, maintenance, and repair. Topics include: Types of irrigation systems, sprinkler layout, sprinkler components, sprinkler selection and spacing, and common sprinkler problems.
- 2. Irrigation System Troubleshooting:** This session focuses on the analytical approach to solving irrigation system failures. Three potential problem areas are examined: (1) mechanical, (2) hydraulic, and (3) electrical. Workshop participants receive practical training in the use of electrical troubleshooting equipment, and an opportunity to demonstrate these skills during the hands-on portion of the session.
- 3. Controller Programming:** A hands-on workshop where participants begin with basic controller features by programming sample cases. They then move into advanced controller features as they input more complex schedules; consideration of temperature/seasonal changes, rain, and landscape activities or demands which limit irrigation times. Irrigation controllers are provided for in-class use.
- 4. Irrigation Scheduling:** This session focuses on two critical questions: When to irrigate? And. How much water to apply? A variety of field techniques and methods are presented as well as the technical aspects to be considered when scheduling irrigation run times. Each class participant is furnished with the tools needed to perform an irrigation scheduling assignment. Tools must be returned to the instructor at the end of the class.

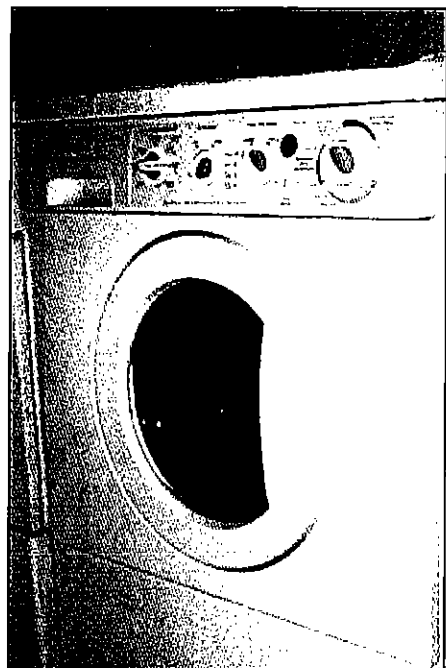
Original course curriculum developed by The Irrigation Training and Research Center at California Polytechnic University in San Luis Obispo for the Metropolitan Water District

This program is funded by Metropolitan and is offered through the Upper San Gabriel Valley Municipal Water District

High-Efficiency Washing Machine Rebate Programs



CONSERVATION



Upper San Gabriel Valley Municipal Water District High Efficiency Clothes Washer Rebate Program

Get a \$275 Rebate!!!

Qualifying high efficiency clothes washers (HECW) typically use up to 50% less water and 50% less energy compared to standard-efficiency washers.

How to Participate

Step 1. BEFORE purchasing a washer, call the Upper District at (626) 443-2297 to confirm residency within the Upper District boundaries and to reserve your rebate. Remember: to be eligible for this rebate, you must call and get a rebate reservation number BEFORE purchasing a washer!

Step 2. An application and list of Qualified High Efficiency Clothes Washers (HECW) will be mailed to you.

Step 3. Purchase one of the washers listed on the Qualified High Efficiency Clothes Washers (HECW) list.

Step 4. Complete the application and attach the following documents: - A copy of the washer sales receipt; and - A copy of a recent water bill for the residential address where the washer will be installed.

Step 5. Mail or submit application and required documents by the due date written in the upper right corner of your application sheet. Mail or submit completed application and required documents to: HECW Program Upper San Gabriel Valley Municipal Water District 11310 Valley Blvd. El Monte, CA 91731

Step 6. Upper District conducts phone and/or site verification of washer purchase and installation.

Step 7. Receive your \$275 rebate check in the mail!

To ensure eligibility and to obtain a rebate application, call (626) 443-2297 BEFORE purchasing a washer.

High Efficiency Clothes Washer Rebate Program Guidelines

- Rebates are offered on a first-come, first-served basis and are available until funding is expended or the Upper District discontinues the program. This program shall at all times be subject to change or termination without prior notice.
- There is a limit of one rebate per household.
- To qualify for a rebate, the clothes washer must be installed in a residential dwelling within the Upper San Gabriel Valley Municipal Water District (Upper District) boundaries. A residential dwelling is defined as a single-family home, condominium, townhouse, apartment, or mobile home that is permanently located within Upper District boundaries. The dwelling must be fully constructed and occupied.
- Only washers listed on the Upper District's list of "Qualified High Efficiency Clothes Washers (HECW)" are eligible for this rebate.
- The Upper District or its representative may inspect, or call, to verify installation of the washer before a rebate is paid. A rebate will not be paid if the Upper District cannot verify installation of a washer.
- Selection, purchase, installation and ownership/maintenance of a washer or related components and/or services, are the sole responsibility of the Applicant.

Don't miss out on this limited time offer!

The Residential High Efficiency Clothes Washer (HECW) Rebate Program is offered by the Upper San Gabriel Valley Municipal Water District in partnership with: the Metropolitan Water District of Southern California, State Department of Water Resources, CalFed Bay Delta Program and the U.S. Bureau of Reclamation.

Public Information Programs

- Conservation and Education Programs
- Press Releases
- Free Water Posters



UPPER SAN GABRIEL VALLEY
MUNICIPAL WATER DISTRICT

Photo Credit: Roy Murphy
Crystal Lake, Angeles National Forest

● FEEDBACK

● PUBLIC INFO

[Home](#)

[About Us](#)

[Capital Projects](#)

[Board of Directors](#)

[Press Releases](#)

[Conservation & Education](#)

[Calendar](#)

[Agency Links](#)

[Free Water Education Posters](#)

[Water Quality Data](#)

[Job Opportunities](#)

[Contact Us](#)

UPPER SAN GABRIEL VALLEY
MUNICIPAL WATER DISTRICT

11310 Valley Blvd.
El Monte, CA 91731
t 626.443.2297
f 626.443.0617
info@usgvmwd.org

CONSERVATION & EDUCATION PROGRAMS

- Up-A-Tree Program
- Watershed
- Suburban Watershed
- Prop 13 NPS Pollution Reduction
- Water Efficient Landscape Project
- High Efficiency Clothes Washer Rebate Program
- Commercial, Industrial, Institutional Rebate Program

The Upper San Gabriel Valley Municipal Water District has also made strides towards incorporating water conservation into their overall goals for effective water management in the San Gabriel Valley.

The District's commitment to water conservation is upheld through the continuation of projects that save water and increase the public's awareness of conservation and other water-related issues. These projects also help the District meet the goals of the Best Management Practices (BMPs) set forth in the Memorandum of Understanding (MOU). The MOU was developed by the California Urban Water Conservation Council (CUWCC) of which the District has been a signatory member since February 19, 1992.

The District has administered projects that not only conserve water, but have also provided other benefits to the surrounding communities such as educational resources for local schools, informational resources for the public regarding water issues, and at times, even job training for troubled youth.

The goals of the District's Water Conservation Program are to expedite implementation of reasonable water conservation measures, develop comprehensive conservation programs based on the BMPs using sound economic criteria and to consider water conservation on an equal basis with other water management options.

“Click here for information about native California plants and tips on starting a water-saving garden.www.bewaterwise.com.”



UPPER SAN GABRIEL VALLEY
MUNICIPAL WATER DISTRICT

Photo Credit: Roy Murphy
Crystal Lake, Angeles National Forest

● [FEEDBACK](#)

● [PUBLIC INFO](#)

[Home](#)

Press Releases

[About Us](#)

[Capital Projects](#)

[Board of Directors](#)

[Conservation & Education](#)

[Calendar](#)

[Agency Links](#)

[Free Water Education Posters](#)

[Water Quality Data](#)

[Job Opportunities](#)

[Contact Us](#)

UPPER SAN GABRIEL VALLEY
MUNICIPAL WATER DISTRICT

11310 Valley Blvd.
El Monte, CA 91731
t 626.443.2297
f 626.443.0617
info@usgvmwd.org

- August 15, 2005 – Upper District Offers \$275 Rebate for High Efficiency Clothes Washers
- June 22, 2005 – Upper District Sponsors Solar Boat Racing Teams from 4 Local High Schools
- April 26, 2005 – Upper District Receives \$2.1 Million Grant for Water Recycling Project Expansion
- April 26, 2005 – Upper District Board Appoints Leon Garcia as Division 3 Director
- March 3, 2005 – Upper District to Hold Local Tree Planting Events on March 12 & April 2
- February 16, 2005 - Construction Begins for New Recycled Water Project
- January 11, 2005 - Assemblymember Chu Joins Nearly 800 San Gabriel Valley Residents at Upper District Low Flush Toilet Event
- January 3, 2005 - Upper District to Provide Free Water Efficient Toilets on January 8
- December 16, 2004 - Water Recycling Pipeline Construction in Whittier Narrows Area to Begin in Early 2005
- October 22, 2004 - Upper District to Give Free Ultra Low Flush Toilets
- October 12, 2004 - Local Watershed Restoration Program to Begin October 16
- October 7, 2004 - Water Fest 2004 Achieves Record High Attendance
- September 24, 2004 - Upper District to Award \$45K for Local Water Education Outreach
- July 15, 2004 - Back by Popular Demand: \$325 Rebate for High Efficiency Clothes Washers
- September 20, 2004 – Water Fest 2004: Making Waves Combining Water Education & Celebration
- May 18, 2004 – Upper District Reduces Standby Charge, Saving Valley Property Owners \$400K Annually
- December 10, 2003 – District Rate Structure for 2004 Includes No Price Increase for Treated Water and Deep Discounts for Long-term Storage



UPPER SAN GABRIEL VALLEY
MUNICIPAL WATER DISTRICT

Photo Credit: Roy Murphy
Crystal Lake, Angeles National Forest



● FEEDBACK

● PUBLIC INFO

[Home](#)

[About Us](#)

[Capital Projects](#)

[Board of Directors](#)

[Press Releases](#)

[Conservation & Education](#)

[Meeting Agendas](#)

[Calendar](#)

[Agency Links](#)

[Water Quality Data](#)

[Job Opportunities](#)

[Contact Us](#)

PUBLIC INFORMATION

CONTACT THE UPPER DISTRICT OFFICE FOR YOUR FREE POSTER!

- **Water Recycling Protects Our Environment**
 - English Version - pdf
 - Spanish Version - pdf
 - Chinese Version - pdf
- **Native Plants Are Naturally Water-wise**
 - English Version - pdf
 - Spanish Version - pdf
 - Chinese Version - pdf
- **Water Wisdom for a Long Hot Summer - pdf**
- **Nature's Water Cycle - pdf**
- **Water Pollution - We Can All Make a Difference - pdf**
- **What is a Watershed - pdf**
- **Water is Life - pdf**
- **Wildfires Do More Than Burn Trees - pdf**

UPPER SAN GABRIEL VALLEY
MUNICIPAL WATER DISTRICT

11310 Valley Blvd.
El Monte, CA 91731
t 626.443.2297
f 626.443.0617
info@usgvmwd.org

Conservation Programs for Commercial, Industrial and Institutional

Upper San Gabriel Valley Municipal Water District
SAVE WATER, SAVE A BUCK
COMMERCIAL, INDUSTRIAL, INSTITUTIONAL REBATE PROGRAM

1. What is the SAV-A-BUC Program?

The SAV-A-BUC Program offers commercial, industrial and institutional facilities rebates for retrofitting several types of high water-use fixtures/equipment with efficient water-use fixtures/equipment.

2. Who is eligible?

Existing commercial, industrial and institutional facilities, located within the boundaries of the Upper San Gabriel Valley Municipal Water District, are eligible.

If your commercial, industrial or institutional facility is located in one of the following cities, it is eligible.

Cities completely within Upper District Boundaries:

Arcadia, Baldwin Park, Bassett, Bradbury, Duarte, El Monte, Irwindale, La Puente, Monrovia, Rosemead, San Gabriel, South El Monte, South San Gabriel, South Pasadena, Temple City, and Valinda.

Commercial, industrial or institutional facilities located in the following cities, should call the SAV-A-BUC hotline to determine eligibility.

Cities partially within Upper District Boundaries:

Azusa, Covina, Glendora, Hacienda Heights, Industry, Montebello, Pasadena, West Covina, and Whittier.

3. Are there any other eligibility requirements?

A retrofit refers to the replacement of an existing high water-use fixture with an efficient water-use fixture. Fixtures that qualify are listed on the Program Criteria Sheet.

New construction is not eligible.

4. How long will this program be available?

Rebates are available for a limited time on a first-come, first-serve basis until funding for the program is used up.

5. How does the program work?

1. Call 1 (877) SAV-ABUC or 1-877-728-2282 to determine eligibility and request application.

Do not remove any of your current fixtures or purchase any fixtures/equipment yet! To receive your rebates, you must be confirmed for eligibility prior to making any purchases.

2. Receive application.

3. After confirming eligibility, purchase your new qualifying efficient water-use devices.

Important: Remember to keep all receipts/invoices for fixtures/equipment and relevant installation costs! Your facility cannot receive a rebate check without copies of the receipts/invoices!

4. Retrofit your facility!

Once retrofitting is complete, fill out the paperwork and send in the paperwork. Don't forget to provide a copy of a recent water bill and copies of receipts for the retrofitted fixtures/equipment.

5. Once your facility's retrofits are confirmed, your facility will be issued a rebate check!

ELIGIBLE FIXTURES/EQUIPMENT

Ultra Low Flush (ULF) Toilets *Rebates of up to \$180!*



Flushometer, gravity-type and dual flush ULF toilets qualify in this category. ULF toilets must be:

- ◆ Rated at 1.6 gallons per flush (gpf) or less, and
- ◆ Replace units using a volume of at least 3.5 gpf.

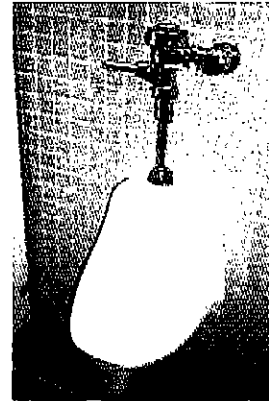
The rebate covers retrofit of the entire fixture (including the bowl and either the tank or the flush valve hardware).

ULF Urinals *Rebates of up to \$100!*

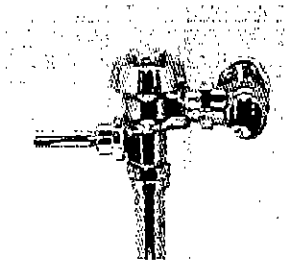
ULF urinals must be:

- ◆ Rated at 1.0 gpf or less, and
- ◆ Replace urinals using a volume of at least 3.0 gpf.

Waterless urinals also qualify under this category.



Flush Valve Kits *Rebates of up to \$25!*



Flush-valve retrofits qualify for the Program only when the complete retrofit of an existing toilet or urinal is proven to be not cost-effective.

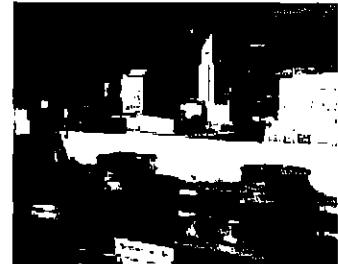
Cooling Tower Conductivity Controllers

Rebates of up to \$700!

Cooling tower conductivity controllers must be:

- ◆ Installed on an existing tower not originally equipped with a controller, or
- ◆ A faulty controller being retrofit.

The conductivity controller must operate such that it transmits information to appropriate valves that will control the amount of blowdown (water drained from the reservoir) and subsequent makeup water (water provided from other sources).



Coin- or Card-Operated High-Efficiency Clothes Washers

Rebates of up to \$450!



Coin- or card-operated high-efficiency clothes washers qualify if they are:

- ◆ Installed and operating in a commercial setting (such as a laundromat, multiple housing unit common area, hotels or motels where available for guest use, or a similar application), and
- ◆ Are replacements for traditional vertical-axis washers.

Automatic Faucet Shut-Off Valves

(pre-rinse spray heads with self-closing valves)

Rebates of up to \$80!

The specific faucet shut-off valves that qualify are pre-rinse spray types used in commercial kitchen settings. Automatic faucet shut-off valve retrofits qualify when replacing:

- ◆ Non-automatic shut-off valves,
- ◆ Existing, but malfunctioning, automatic shut-off valves, or
- ◆ High-volume, automatic shut-off valves (rated at more than 1.6 gallons per minute).

The replacement automatic unit *must* have:

- ◆ A self-closing valve, and
- ◆ Rated at no more than 1.6 gallons per minute.

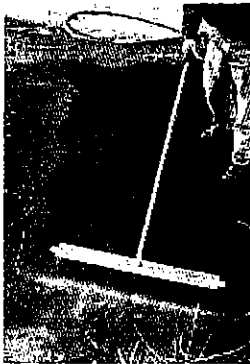


Hospital X-Ray Processor Recirculating System
Rebates of up to \$3,000!

- ◆ Recirculating system must be installed on an approved x-ray processor.



Water Pressurized Broom
Rebates of up to \$150!



- ◆ Must be replacing a hose and nozzle application or other high pressure washing device.

For more information, Call 1-877-SAV-ABUC or 1-877-728-2282

Ultra-Low Flush Toilet (ULFT) Residential Retrofit Program

Ultra Low Flush Toilet (ULFT) Residential Retrofit Program

What is the ULFT Retrofit Program?

The Ultra Low Flush Toilet (ULFT) Retrofit Program is one of several water conservation programs implemented by the Upper San Gabriel Valley Municipal Water District (Upper District). The ULFT program allows any resident, within the Upper District boundaries, to obtain up to two free ULFTs for their home. The program is open to both single-family and multi-family residents whether they own or rent.

The ULFT program typically utilizes local high schools located within the District boundaries to assist in implementing the program. Participating schools are typically selected through a lottery-style process. The number of schools selected to participate annually depend on the amount of ULFTs that funds have been allocated for in a given fiscal year.

A contracted program consultant is retained by the Upper District to work with the selected schools in administering the program and directing field operations.

What is the Benefit of this Program?

The ULFT program is a win-win-win situation:

- ✓ The Upper District is able to distribute a substantial amount of free water saving toilets to local residents in a prompt and effective manner.
- ✓ The participating schools are able to earn a substantial amount of funds with a minimal amount of effort and time. The schools earn this money since the students are assisting the District in minimizing the administration and marketing costs of the program. The participating schools earn \$10 for each "completed retrofit". A "completed retrofit" means a ULFT given out and the old toilet brought back. If more than one school participated, the number of completed retrofits is totaled and the amount earned is divided equally between the participating schools.
- ✓ Local residents are given the opportunity to obtain a new toilet that will save a substantial amount of water.

Schools that have participated in previous Upper District ULFT programs:

- | | |
|--|--|
| ☞ Arroyo High School, El Monte | ☞ Northview High School, Covina |
| ☞ Azusa High School, Azusa | ☞ Rosemead High School, Rosemead |
| ☞ Baldwin Park High School, Baldwin Park | ☞ San Gabriel High School, San Gabriel |
| ☞ El Monte High School, El Monte | ☞ South El Monte High School, South El Monte |
| ☞ Gabrielino High School, San Gabriel | ☞ Sierra Vista High School, Baldwin Park |
| ☞ La Puente High School, La Puente | ☞ South Hills High School, West Covina |
| ☞ Los Altos High School, Hacienda Heights | ☞ Glen A. Wilson High School, Hacienda Heights |
| ☞ John Marshall Elementary School, San Gabriel | ☞ Workman High School, City of Industry |
| ☞ Mountain View High School, El Monte | |
-

Other Upper San Gabriel Valley Municipal Water District Programs



CONSERVATION



Upper San Gabriel Valley Municipal Water District Watershed Restoration Program

The Watershed Restoration Program initially began in 1991 and is a cooperative partnership between the Upper San Gabriel Valley Municipal Water District and U.S. Forest Service to protect and maintain the local watershed.

Why is this Program Important?

Fires, mudslides and the encroachment of non-native vegetation have caused accelerated erosion, which in turn, causes siltation of the canyon reservoirs and streambeds. Siltation reduces the water conservation and storage capacity of reservoirs as well as the percolation capacity of streambeds and spreading grounds. Heavy recreational use has also had a negative impact on the local habitat by causing a reduction in the riparian vegetation which in turn has caused the destabilization of the river bank resulting in increased soil runoff directly into the river with subsequent siltation problems down-stream.

By replanting local areas with native vegetation, soils will not erode so quickly and will allow rain and other precipitation to percolate into the ground and make its way into our local aquifer. The vegetation will also help alleviate siltation that causes increased blockage of waterways and filtration systems.



Native Vegetation Project

Several times a year, volunteers of all ages are invited to take part in collecting seeds and/or re-planting germinated seeds in local watershed areas. The collection, germination and planting of such native vegetation helps to stabilize slopes and overlying soil for erosion control and mitigation of siltation. Such planting also allows a larger amount of precipitation to percolate into the ground and aids in restoration of the natural habitat. Since its inception, over 65,000 trees have been planted through this program.

Interpretive Signage Project

Interpretive signs have been developed that discuss the function and importance of our local watershed as well as the historical background of the local dams and San Gabriel River. Two signs can be found at rest stops along Highway 39 and a third sign is located at a rest stop along the East Fork Road, just a short distance from Highway 39.

The Watershed Restoration Nursery

The watershed restoration nursery includes a green house and potting shed that have been established at the Mt. Baldy Visitors Center. This nursery enables seeds to be stored and native vegetation to be germinated in an environment protected from the elements of weather, plant diseases and local animals that forage on vegetation. Such protection means a greater amount of plants and seeds readily available for re-planting areas devastated by fires and other disasters.



UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT

invites you and your family to:

Water Fest 2005

Saturday, October 1, 2005

**Water Fest 2005 & The 5K Healthy
Parks Youth Walk**

The Upper San Gabriel Valley Municipal Water District invites you and your family to the third annual water awareness festival – Water Fest 2005. The event is Saturday, October 1 from 10am to 2 pm at Arcadia County Park, 405 S. Santa Anita Ave. Water Fest 2005 is *free* and will provide free food, interactive exhibits and giveaways including one, high efficiency clothes washer.

“Water Wise Gardens” is this year's theme and will feature native plant demonstration gardens and workshops by the Rancho Santa Ana Botanic Garden. Other attractions include: The Aquarium on Wheels from the Long Beach Aquarium of the Pacific, live wild animals that are native to the San Gabriel River Watershed, solar-powered boats built by local high school students, and giant pumpkins grown with recycled water. Download the Water Fest 2005 Flier below (which includes a map).

To kick off the event, the Upper District is hosting its second annual 5K walk from 8 -10 a.m. on the morning of Water Fest in Arcadia County Park. With a \$10 registration fee for the walk (per person), you will receive a T-shirt and other goodies. Proceeds will benefit the American Heart Association and the LA County Healthy Parks Program. The walk will end directly in front of the Water Fest 2005 entrance – right when the festival begins! Download the 5K Walk sign up form below.

**For details on Water Fest and/or the 5K Walk, contact
the
Upper District at (626) 443-2298.**

Click below for the:

[Water Fest 2005 Flier](#) - pdf format

[5K Walk Sign up form and Flier](#) - pdf format





CONSERVATION



San Gabriel Valley Suburban Watershed Protection Program

The San Gabriel Valley Suburban Watershed Protection is a coordinated effort that combines community volunteer participation and educational outreach with local municipal efforts to plant and maintain trees within the cities of Monrovia and Arcadia.

Arcadia and Monrovia are situated at the base of the San Gabriel Mountains, that comprise much of the local watershed, and are susceptible to severe damage from runoff, siltation and erosion problems after rain falls or snow begins to melt in the local mountain and canyon areas. The planting and maintenance of approximately 615 trees through this project will help to raise public awareness about urban runoff and erosion issues, while providing a source of shading.

The program is funded through a grant obtained by the Upper District under the Watershed, Wildlife and Parks Improvement Bond Act of 2000 (Proposition 12). Additional funding is provided directly by the Upper District and through in-kind services provided by the cities of Arcadia and Monrovia.



Upper San Gabriel Valley Municipal Water District SAN GABRIEL WATERSHED NPS POLLUTION REDUCTION PROGRAM








Background

The San Gabriel Watershed faces a number of environmental challenges that include excessive loadings of trash, nutrient and coliform. There is also an ongoing risk of sewage runoff from antiquated septic systems and portable lavatories.

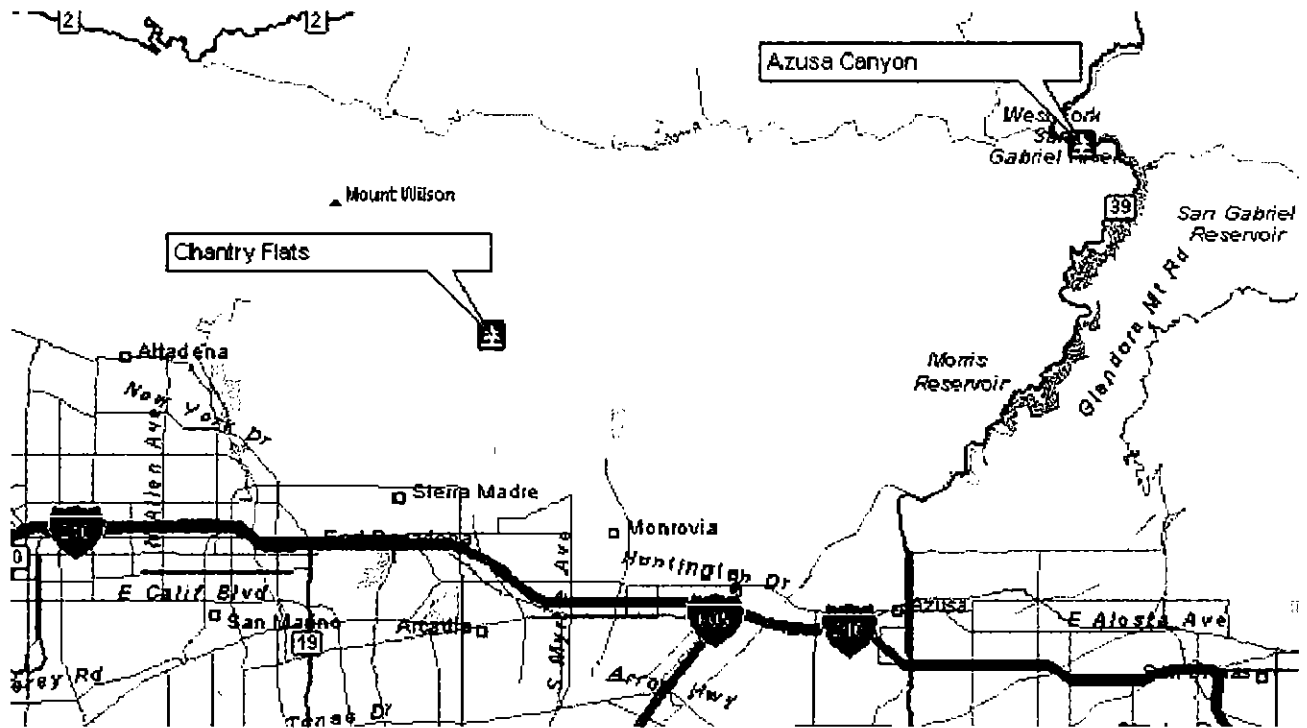
The Upper District has been awarded grant funding by the State Water Resources Control Board, Division of Water Quality, to implement a NPS Pollution Reduction Program for the San Gabriel Watershed. This program will build and expand upon the restoration efforts of the Upper District's long-standing partnership with the US Forest Service.

Project measures will primarily be implemented within two key locations of the Angeles National Forest: San Gabriel Canyon and Chantry Flats.

Project Measures

-  *Trash reduction efforts, which will include the provision of trash collection bags/tools, increased volunteer cleanup events and collection removal.*
Reduction of trash through these efforts will reduce debris runoff and pollutant loadings in the groundwater and surface water.
-  *Retrofit several lavatories with self-composting toilets.*
Self-composting toilets will improve sewer collection and decrease septic system leakage, which contributes to groundwater contamination. Installation of these permanent lavatories reduces use of portable units, which are prone to being tipped over resulting in raw sewage spillage contaminating the groundwater and surface water.
-  *Stream clearance efforts to remove blockage caused by sedimentation and debris build-up.*
Reduction of debris and turbidity would increase oxygen levels in the water and reduce the number of fish dying from oxygen deficiency. This would reduce further damage to spawning grounds and decrease risks to the Santa Ana Sucker, which is already designated as a threatened species of fish.
-  *Clearance and rehabilitation of designated trails/footpaths that have deteriorated.*
Promotion of easily accessible designated pathways and deterrence from creation of informal pathways, will minimize the destruction of vegetation and soil breakdown caused by human foot and bicycle traffic. Diminished erosion would reduce stream bank deterioration and further siltation build-up in the local reservoirs, thereby increasing water storage capacity.
-  *Installation of natural rock and plant barriers to block off, or re-route, foot traffic from informal pathways.*
Informal pathways increase damage to the vegetation and cause further erosion. Natural barricades are intended to dissuade forest visitors from continued use of such paths.
-  *Stabilization of stream banks and slopes identified as highly erosive areas, through revegetation efforts.*
Minimize erosion that damages the riverbanks and causes further siltation and debris to build-up in the local reservoirs, reducing water storage capacity. Replanting vegetation can also trap and remove phosphorus, nitrogen, and other nutrients that can cause eutrophication of the river. The nutrients are removed through uptake by vegetation, biochemical processes by plants and bacteria, and the geophysical trapping of the soil in the vegetation.
-  *Proactive public outreach, which will include the development of an informational kiosk, interpretive signage and provision of educational literature.*
Volunteer events will provide opportunities for substantial community involvement and will encourage environmental stewardship. Provision of the educational kiosk and materials will deter littering and dumping and educate visitors about the watershed.

Map of Project Site Locations: Azusa Canyon and Chantry Flats, Angeles National Forest, California



Aerial Map of the Angeles National Forest, California





*They are beautiful in their peace; they are wise in their silence.
They will stand after we are dust. They teach us, and we tend them.*

Galeain ip Altium MacDunelmor

Thank you for your interest in the "Up-a-Tree" Program.

Please fill out the enclosed request form and send it in with your payment. A Tree Certificate acknowledging your donation will be mailed directly to you or to the recipient. If you prefer the Tree Certificate be sent directly to the recipient, please fill in their address in the space provided.

The Upper San Gabriel Valley Municipal Water District is working in conjunction with U.S. Forest Service, helping to restore the San Gabriel Rivers and Mountains Watershed. Funds are collected by the Water District and are used towards the purchase of native saplings, such as oaks and pines, for planting in the Angeles National Forest. Trees aid in the prevention of mudslides and sediment build-up within our local drinking water reservoirs located in the canyons above the San Gabriel Valley. Trees fight soil erosion, help clear the air, provide wildlife habitat, and keep rivers running clean.

Your \$10 donation goes towards the purchase of a tree that is planted in the Angeles National Forest by U.S. Forest Service personnel. For each donation made, you or the recipient will get a sequentially numbered Tree Certificate acknowledging the number and types of trees contributed to the reforestation and preservation of our natural watershed areas.

Again, thank you for your interest. Please send in your request form so that we can begin processing your order.

Sincerely,

Upper San Gabriel Valley Municipal Water District
11310 E. Valley Blvd. El Monte, CA 91731
(626) 443-2297 - (626) 443-0617 Fax



Cut Here and Mail in Request Form

Up A Tree Request Form

Your Name _____ Phone _____ e-mail _____

Your Address _____ City, State, Zip _____

Recipient Name (Who certificate is mailed to): _____ Phone _____

Recipient Address _____ City, State, Zip _____

Individual Name(s) or Group Name on Certificate

(If Different from Recipient Name)

(John Smith, Girl Scout Troop 123, The Smith Family, John & Mary Smith, etc.)

Choose one of the following: ☐ In Honor of ☐ In Memory of ☐ On Behalf of ☐ Other (use line below) ☐ No Certificate

Other: Use this line for additional information to include on certificate. (The Smith's 40th Anniversary, Joe Smith's 1st Birthday, Jane Smith's Graduation, etc.).

Total # Trees _____ Type/# of Trees ☐ Pine _____ ☐ Oak _____ ☐ Any _____ Total @ \$10.00 each Tree \$ _____ 0

Please make checks payable to: **USGVMWD** Mail to: 11310 E. Valley Blvd., El Monte, CA 91731

If you have any questions, you can reach District Staff by phone at 626-443-2297, by fax at 626-443-0617, or by e-mail at pam@usgvmwd.org

APPENDIX M
Draft Urban Water Shortage
Contingency Resolution

1
2
3
4
5
6
7
8
9
0
1
2
3
4
5
6
7
8
9
0
1
2
3
4
5
6
7
8

2
3
4
5
6
7
8
9
0
1
2
3
4
5
6
7
8
9
0
1
2
3
4
5
6
7
8

6
7
8

90

- 1
- 2
- 3

5
6
7

0901

3
4
5
6
7
8

1 SECTION 2. REGULATIONS AND RESTRICTIONS ON WATER USE

2 Upper District, in order to conserve water supply for the greatest public benefit and to
3 reduce the quantity of water used within Upper District, wasteful use of water should be
4 eliminated. To this end, Upper District encourages its member agencies to observe the following
5 regulations and restrictions on water use:

6 A. No retail customer shall waste water. As used herein, the term "waste" means:

- 7 1. Use of potable water to irrigate turf, ground-cover, shrubbery, crops, vegetation,
8 and trees (agricultural accounts are excluded from the time of irrigation restriction)
9 between the hours of 10:00 o'clock A.M. and 6:00 o'clock P.M. or in such a
10 manner as to result in runoff for more than five (5) minutes;
- 11 2. Use of potable water to wash sidewalks, walkways, driveways, parking lots, open-
12 ground or other hard surfaced areas except where necessary for public health or
13 safety;
- 14 3. Allowing potable water to escape from breaks within the customer's plumbing
15 system for more than twenty-four (24) hours after the customer is notified or
16 discovers the break;
- 17 4. Washing cars, boats, trailers, aircraft, or other vehicles by hose without a shutoff
18 nozzle and bucket except to wash such vehicles at commercial or fleet vehicle
19 washing facilities using water recycling equipment;
- 20 5. Use of potable water to clean, fill or maintain decorative fountains, lakes or ponds
21 unless such water is recycled.

22 B. The following restrictions are effective during a declared Water-Shortage Emergency.

- 23 1. No restaurant, hotel, café, cafeteria or other public place where food is sold, served
24 or offered for sale, shall serve drinking water to any customer unless expressly
25 requested;
- 26 2. Use of potable water for construction, compaction, dust control, street or parking
27 lot sweeping, building washdown, or to irrigate turf, ground-cover, shrubbery,
28 vegetation, and trees where non-potable or recycled water is sufficient and available;

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

- 3. Use of potable water for sewer system maintenance or fire protection training unless absolutely necessary for the immediate protection of public health and safety or the protection of property, or if recycled or non-potable water is available;
- 4. Use of potable water for any purpose in excess of the amounts allocated for each class of service.

C. Other restrictions may be adopted by Resolution of the Upper District Board of Directors as necessary during a declared Water Shortage Emergency, to safeguard the adequacy of the water supply for domestic, sanitation, fire protection, and environmental requirements.

PASSED, APPROVED, ADOPTED AND ORDAINED this ____ day of _____, 20__.

ATTEST

SECRETARY

SEAL

PRESIDENT

Appendix N
Resolution No. 6-90-266

RESOLUTION NO. 6-90-266

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE
UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT
URGING ITS SERVICE AREA TO REDUCE DEMANDS BY 10
PERCENT TO MITIGATE THE EFFECTS OF THE 1990 CALI-
FORNIA DROUGHT

WHEREAS, California is in the fourth consecutive year of
below-normal precipitation;

WHEREAS, precipitation for the current water year has
been substantially below normal in the watersheds of the imported
supplies serving Southern California;

WHEREAS, precipitation in Southern California has also
been below average and water levels in the Main San Gabriel
groundwater basin have declined more than 40 feet the last
few years;

WHEREAS, during the drought of 1988 Southern California
reduced demands an additional 8 percent from what they would
ordinarily have been;

WHEREAS, the drought of 1990 appears to be more severe
than the drought of 1988;

WHEREAS, The Upper San Gabriel Valley Municipal Water
District Board of Directors in 1988 urged all cities, water
supply agencies and other public and private water users to
adopt conservation measures to mitigate the effects of the
continuing drought; and

WHEREAS, there is a need to reduce total demands on all
water supply entities within the Upper San Gabriel Valley Muni-
cipal Water District service area by 10 percent in 1990 as
compared to 1989, to reduce the potential for shortages for
this year and even more severe shortages next year;

1 NOW, THEREFOR, BE IT RESOLVED BY THE BOARD OF DIRECTORS
2 OF THE UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT as
3 follows:

4 Section 1. That the Board of Directors urges all cities,
5 water supply entities, and other public and private water users
6 in its service area to reduce their own usage and to urge their
7 customers to reduce their usage by at least 10 percent, as
8 compared to 1989, to assist in the mitigation of the effects
9 of the drought during 1990, and to maintain the conserved water
10 in storage against the possibility of even more severe shortages
11 in 1991; and

12 Section 2. That a copy of this resolution be sent to
13 the governing body and chief executive officer of every city
14 and water supply entity within the Upper San Gabriel Valley
15 Municipal Water District's service area.

16 PASSED, APPROVED AND ADOPTED this 6th day of June, 1990.

17

18

19

20 ATTEST:

21

22

23

24

25

26

27

28


PRESIDENT


SECRETARY

Appendix O
Resolution No. 4-00-371
And No. 4-95-333

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25
- 26
- 27
- 28

WHEREAS, the Metropolitan Water District of Southern California ("MWD" herein) has adopted water rates and charges for its classes and conditions of service for the fiscal year 2000/01 and this District wishes to reflect MWD's new rates and charges in the water rates and charges of this District; and

WHEREAS, this District requested that MWD continue its Standby Charge in this District's service area with the intention that the above referenced MWD charges be paid from the funds generated from said Standby Charge for fiscal year 2000/01; and

WHEREAS, in order to accommodate the requirements of the judgement in Upper San Gabriel Valley Municipal Water District vs. City of Alhambra, et al., LASC No. 924128, and the customs and practices of the Watermaster, this District will adopt a seasonal storage service groundwater replenishment rate for fiscal year 2001/02.

1 of 3 (4-00-371)

Section 1. Resolution No. 4-99-364 adopted April 7, 1999, is hereby repealed. The water rates specified in said resolution, however, are hereby ratified, affirmed, and shall remain in full force and effect until July 1, 2000.

Section 2. Effective July 1, 2000, the following rates are established.

<u>Class of Service</u>	<u>Rate per acre-foot</u>
Full Service	
Untreated	366.45
Treated	452.55
Seasonal Storage	
Long-Term Untreated	246.65
Long-Term Treated	306.50
Shift - Untreated	281.30
Shift - Treated	341.15

The definition and application of the foregoing classes and conditions of service shall be the same as those established, interpreted and amended from time to time by MWD through its Administrative Code and such other rules, regulations, policies ordinances or resolutions that have been or may be adopted by the MWD Board of Directors, which are by this reference are incorporated herein and adopted for this District as though set forth herein in their entirety.

Section 3. Effective July 1, 2001, the rate for untreated seasonal storage service water for groundwater replenishment shall be \$246.65 per acre-foot.

Section 4. In addition to the water rate for seasonal storage service water for groundwater replenishment, each groundwater replenishment customer shall pay a monthly ready-to-serve charge of \$42.00 for each cubic foot per second of groundwater replenishment service connection capacity, at an amount not-to-exceed \$6,300.00 per month, payable in advance.

Section 5. A minimum charge of \$25.00 per month will be made for all open service connections, irrespective of amount of water used.

Section 6. All sales, deliveries and availability of water at the rates established herein shall be subject to the ability of the District to sell, deliver and make available such water under operating conditions determined by the General Manager of this District and of MWD, and subject to the water service regulations of this District and of MWD.


1 Section 7. The Board of Directors finds that the water rates and charges established herein will
2 result in a fair and equitable revenue source to partially fund budgeted expenditures, thereby reasonably
3 allocating costs of service to those who benefit therefrom.

4 Section 8. The Secretary of the District shall cause a copy of this Resolution to be mailed to all
5 current purchasers of water from the District including the users of water replenishment service
6 connections.

7 Dated this 4th day of April, 2000.

10 **ATTEST**

11 
12 **SECRETARY**


PRESIDENT

14 **SEAL**

RESOLUTION NO. 4-95-333**A RESOLUTION OF THE BOARD OF DIRECTORS OF
THE UPPER SAN GABRIEL VALLEY MUNICIPAL
WATER DISTRICT REPEALING RESOLUTION NO. 5-
94-321 ADOPTING WATER RATES FOR THE 1995/96
FISCAL YEAR AND ADOPTING A WATER RATE FOR
SEASONAL STORAGE WATER SERVICE FOR
GROUNDWATER REPLENISHMENT FOR THE 1996/97
FISCAL YEAR**

WHEREAS, The Metropolitan Water District of Southern California ("MWD" herein) has adopted water rates and charges for its classes and conditions of service for the fiscal year 1995/96 and this District wishes to reflect MWD's new rates and charges in the water rates and charges of this District; and

WHEREAS, MWD has established new charges in their fiscal year 1995/96 rate structure including a Readiness-to-Service Charge, a New Demand Charge and a Connection Maintenance Charge; and

WHEREAS, this District requested by its Resolution No. 2-95-332 that MWD continue its Standby Charge for fiscal year 1995/96 in this District's service area with the intention that the above reference new MWD charges be paid from the funds generated from said Standby Charge for fiscal year 1995/96; and

WHEREAS, during Fiscal Year 1991/92 Upper District entered into an agreement with MWD for the enlargement of the discharge valve on Service Connection USG-3. As part of this agreement, MWD will charge Upper District an additional \$2.00 per acre foot for all water delivered through this enlarged discharge valve. It is the intention of Upper District to incorporate this \$2.00 per acre foot charge into the rate established for Seasonal Storage Service Untreated Water delivered through Service Connection USG-3; and

WHEREAS, in order to accommodate the requirements of the judgement in Upper San Gabriel Valley Municipal Water District v. City of Alhambra, et al., LASC No. 924128, and the customs and practices of the Watermaster, this District will adopt a seasonal storage service groundwater replenishment rate for fiscal year 1996/97.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF

THE UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT as follows:

Section 1. Resolution No. 5-94-321 adopted May 4, 1994, is hereby repealed. The water rates specified in said resolution, however, are hereby ratified, affirmed, and shall remain in full force and effect until July 1, 1995.

Section 2. Effective July 1, 1995, the following rates are established.

<u>Class of Service</u>	<u>Rate per acre-foot</u>
Noninterruptible Water	
Untreated	361.20
Treated	447.30
Emergency Water	
Untreated	1,083.60
Treated	1,341.90
Seasonal Storage Service	
Untreated	242.45
Treated	302.30

The definition and application of the foregoing classes and conditions of service shall be the same as those established, interpreted and amended from time to time by MWD through its Administrative Code and such other rules, regulations, policies ordinances or resolutions that have been or may be adopted by the MWD Board of Directors, which are by this reference are incorporated herein and adopted for this District as though set forth herein in their entirety.

Section 3. Effective July 1, 1996, the rate for untreated seasonal storage service water for groundwater replenishment shall be 254.57 per acre-foot.

Section 4. In addition to the water rate for seasonal storage service water for groundwater replenishment, each groundwater replenishment customer shall pay a monthly ready-to-serve charge of \$42.00 for each cubic foot per second of groundwater replenishment service connection capacity, at an amount not to exceed \$6,300.00 per month, payable in advance.

Section 5. A minimum charge of \$25.00 per month will be made for all open service connections, irrespective of amount of water used.

Section 6. All sales, deliveries and availability of water at the rates established

1 herein shall be subject to the ability of the District to sell, deliver and make available such
2 water under operating conditions determined by the General Managers of this District and
3 of MWD, and subject to the water service regulations of this District and of MWD.

4 Section 7. The Board of Directors finds that the water rates and charges established
5 herein will result in a fair and equitable revenue source to partially fund budgeted
6 expenditures, thereby reasonably allocating costs of service to those who benefit therefrom.

7 Section 8. The Secretary of the District shall cause a copy of this Resolution to be
8 mailed to all current purchasers of water from the District including the users of water
9 replenishment service connections.

10 Dated this 19th day of April, 1995

11
12
13 
PRESIDENT

14 ATTEST

15
16 
17 SECRETARY

18
19 SEAL
20
21
22
23
24
25
26
27
28

Appendix P
Memorandum of Understanding
For Master Plan Revisions



Central Basin Municipal Water District
17140 S. Avalon Blvd • Suite 210 • Carson, CA 90746-1296
telephone 310-217-2222 • fax 310-217-2414

July 15, 2005

Tim Jochem
General Manager
Upper San Gabriel Valley Municipal Water District
11310 Valley Boulevard
El Monte, CA 91731

Darin Kasamoto
General Manager
San Gabriel Valley Municipal Water District
549 E. Sierra Madre Avenue,
P.O. Box 1299,
Azusa, CA 91702

Dear Gentlemen:

Memorandum of Understanding for Master Plan Revision

During a recent meeting, Mr. Jochem of Upper San Gabriel Valley Municipal Water District (USGVMWD) suggested that his agency and San Gabriel Valley Municipal Water District (SGVMWD) might be interested in participating in a master plan study Central Basin Municipal Water District (CBMWD) was about to initiate to determine the potential for expansion of the CBMWD recycled water distribution system. The original area of study would be expanded to include the USGVMWD and SGVMWD service areas.

To that purpose, attached is the DRAFT Memorandum of Understanding and the DRAFT Request for Proposals (RFP) for your review. CBMWD's intention is to send out the RFP next week, receive proposals in August and award the contract in September subject to your review and input.

If you have any questions regarding this matter, please contact me at (310) 660-6208.

Sincerely,

Joe Walters
Recycled Water Project Manager
West Basin Municipal Water District

CC: Art Aguilar, CBMWD
Rich Nagel, CBMWD
Paul Shoenberger, CBMWD

DRAFT

MEMORANDUM OF UNDERSTANDING BETWEEN SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT, UPPER San Gabriel VALLEY MUNICIPAL WATER DISTRICT, AND CENTRAL BASIN MUNICIPAL WATER DISTRICT

As of July 14, 2005, the **San Gabriel Valley Municipal Water District ("SGVMWD")**, **Upper San Gabriel Valley Municipal Water District ("USGVMWD")**, and the **Central Basin Municipal Water District ("Central Basin")** hereby agree as follows:

1. Purpose.

a) Central Basin distributes high quality recycled water produced by the County of Los Angeles. Central Basin will be building a recycled water pipeline known as the Southeast Water Reliability Project which is capable of providing recycled water service to the service areas of USGVMWD and SGVMWD. USGVMWD and SGVMWD wish to explore the possibilities for distributing Central Basin's recycled water in their service area.

b) In July 2000, Central Basin produced a Recycled Water Master Plan which identified potential customers and recycled water sales. Central Basin has determined that the master plan should be revised before pursuing customer commitment and proceeding with capital projects.

c) Central Basin will solicit proposals from qualified firms and award a contract to the successful bidder for the development of the revised Recycled Water Master Plan.

d) USGVMWD and SGVMWD wish to share in the development, cost of development, and results of the revised Recycled Water Master Plan.

2. Agreement.

The parties mutually agree to participate in the development of the revised Recycled Water Master Plan, share in the cost of its development, and share in its results.

3. Indemnification.

a) SGVMWD shall hold harmless, defend at its own expense, and indemnify Central Basin and USGVMWD, their officers, employees, and agents against any and all liability, claims, losses, damages, or expenses, including reasonable attorneys' fees, arising from all acts or omissions to act of SGVMWD or its officers, agents, or employees in rendering services under this agreement; excluding, however, such liability, claims, losses, damages, or expenses arising solely from Central Basin's and USGVMWD's negligence or willful acts.

b) USGVMWD shall hold harmless, defend at its own expense, and indemnify Central Basin and SGVMWD, their officers, employees, and agents against any and all liability, claims, losses, damages, or expenses, including reasonable attorneys' fees, arising from all acts or omissions to act of USGVMWD or its officers, agents, or employees in rendering services under this agreement; excluding, however, such liability, claims, losses, damages, or expenses arising solely from Central Basin's and SGVMWD's negligence or willful acts.

c) Central Basin shall hold harmless, defend at its own expense, and indemnify SGVMWD and USGVMWD, their officers, employees, and agents against any and all liability, claims, losses, damages, or expenses, including reasonable attorneys' fees, arising from all acts or omissions to act of Central Basin or its officers, agents, or employees in rendering services under this agreement; excluding, however, such liability, claims, losses, damages, or expenses arising solely from SGVMWD's and USGVMWD's negligence or willful acts.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date of the latest signature below.

San Gabriel Valley Municipal Water District

By: _____ Date: _____

Upper San Gabriel Valley Municipal Water District

By: _____ Date: _____

Central Basin Municipal Water District

By: _____ Date: _____
Art Aguilar, Co-General Manager

By: _____ Date: _____
Rich Nagel, Co-General Manager

I. INTRODUCTION

Central Basin Municipal Water District (CBMWD), San Gabriel Valley Municipal Water District (SGVMWD), and Upper San Gabriel Valley Municipal Water District (USGVMWD) are requesting proposals from qualified consultants to revise a Recycled Water Master Plan originally developed in 1999-2000. This Request for Proposals (RFP) describes the scope of services, selection process, experience requirements and minimum information that must be included in the submittal. Failure to submit in accordance with the requirements and procedures of this RFP may be cause for disqualification. Failure to submit on or before the submittal deadline shall be cause for disqualification.

GENERAL INFORMATION

Over the past fifteen years, CBMWD has established a successful water recycling program that provides a reliable, local supply of water to replace some non-potable water uses such as landscape irrigation and industrial applications. In fiscal year 2003-2004, CBMWD sold over 3,500 acre-feet of recycled water. This reduces the regions dependence on imported water and the impact of drought or other water shortages.

CBMWD purchases recycled water from the Los Angeles County Sanitation District (LACSD) and transmits to customer sites via an independent distribution system. The District then wholesales the recycled water to the local retail purveyor which in turn sells it to the end user. Central Basin currently serves all or a portion of the cities of Artesia, Bell, Bell Gardens, Bellflower, Carson, Cerritos, Commerce, Compton, Cudahy, Downey, East Los Angeles, Huntington Park, La Habra Heights, La Mirada, Lakewood, Lynwood, Maywood, Montebello, Norwalk, Paramount, Pico Rivera, Santa Fe Springs, South Gate, Vernon, Whittier, and unincorporated portions of Los Angeles County (Figure 1).

The Title 22 (disinfected tertiary) recycled water produced by Los Angeles County Sanitation District serves nearly 200 customers on CBMWD's 50 mile long distribution system. Expansion of the system will continue as additional customers are identified and new distribution pipelines and facilities are deemed economically viable and technically feasible.

CBMWD is adjacent to two agencies that have expressed interest in investigating opportunities to partner with CBMWD for recycled water distributed to their service areas. Upper San Gabriel Valley Municipal Water District (USGVMWD) is positioned north of the CBMWD cities of Pico Rivera and Montebello. San Gabriel Valley Municipal Water District (SGVMWD) serves four non-contiguous cities including Monterrey Park and Alhambra which are north of CBMWD and west of USGVMWD.

In July 2000, CBMWD produced a recycled water master plan which identified nearly 1,500 potential customers and over 26,853 acre-feet per year of potential new recycled water sales. With five years elapsed and the potential to partner with other agencies outside our service area, it is appropriate at this time to revise the Master Plan before pursuing customer commitment. The following Scope of Services describes the work to be completed.

The project will review existing facilities and identify additional facilities necessary to provide reliable service and adequate pressure and flow to all customers within a defined area of the master plan. Finally an economic analysis will be completed to determine the feasibility of providing recycled water to the proposed expansion areas.

SCOPE OF SERVICES

The scope of services to be provided by the consulting engineer shall include; data gathering and assessment; conceptual pipeline routing, developing a customer database, hydraulic modeling, economic analysis, cost estimates and project management. These services are more specifically described as follows.

1. Data Gathering (Customer Demand)

The consultants shall update the existing data base by revising the five year average water consumption for all customers using an average of ten acre-feet (10 AFY) or more per year. To obtain the water consumption history, the consultant shall meet with the water purveyors (private and municipal). Initial meetings with the water purveyors should be coordinated so that a CBWMD representative has the opportunity to attend.

Water utilities serving water within the study area with potential for recycled water expansion are:

CBWMD

- City of Bell Gardens,
- Bellflower-Somerset Mutual Water Company,
- California Water Services Company,
- City of Commerce,
- City of Compton,
- City of Downey,
- City of Huntington Park,
- La Habra Heights County Water District,
- LADWP,
- City of Lynwood,
- Maywood Mutual Water #1,
- City of Montebello,
- Montebello Land and Water,
- City of Norwalk,
- Orchard Dale,
- City of Paramount,
- Park Water Company,
- Peerless Water Company,
- City of Pico Rivera,
- Pico Water District,
- San Gabriel Valley Water Company – Montebello,
- San Gabriel Valley Water Company – Whittier,
- City of Santa Fe Springs,
- City of South Gate,
- Southern Montebello Irrigation,
- Southern California Water Company,
- Suburban Water Systems,
- City of Vernon,
- Walnut Park Mutual Water Company, and
- City of Whittier.

USGVMWD

- South El Monte,
- South San Gabriel, and
- Rosemead

SGVMWD

- Alhambra, and
- Monterrey Park

2. Data Assessment

The consultant shall interpret the information received under the data gathering task. Data assessment includes determining:

- total demand and amount of potential recycled water,
- the demand category (irrigation / industrial),
- type of irrigation (school, park, playground, nursery, golf course, etc.),
- type of industry (refinery, dye house, concrete mixing, etc.), and
- industrial process (cooling towers, boilers, etc.).

The consultant will submit their method for assessing the data to CBMWD for review.

3. Database

The consultant shall update the customer database with information gathered in a format provided by CBMWD. Fields will include:

- Customer name,
- Facility type,
- Use type,
- Contact name and title,
- Street address,
- City / Zip,
- Estimated recycled water use,
- Phone,
- Purveyor, and
- Thomas Guide Grid location

Additional fields may be suggested by the consultant. CBMWD will review the database before implementation.

4. Conceptual Pipeline Routing

The consultant shall determine a conceptual level of mainlines and laterals to address customer recycled water demands. The routing shall be used as an estimate of pipeline length in the hydraulic model. The consultant shall submit conceptual level routing for CBMWD review.

5. Interconnections

The consultant will evaluate the water quality and hydraulic issues among possible interconnections within the service area. The consultants shall submit their interconnection analysis to CBMWD for review.

6. Hydraulic Modeling

The consultants shall develop a hydraulic model for the existing and expansion project using H2Onet. CBMWD shall provide modeling information for existing system. The hydraulic model will include pipeline routing, pipeline sizing, user demands, locating and sizing booster stations, locating and sizing storage tanks all with consideration to avoid detention times that may cause chlorine deterioration and a resulting odor in the recycled water. Consultants shall submit the hydraulic modeling criteria, the proposed peaking factor(s), and the methodology for determining system storage to CBMWD for review prior to actual system modeling. Modeling results shall be displayed on node/link map and in tables.

7. Cost Estimates

The consultant shall prepare a design, construction, and operation and maintenance cost estimate for all proposed facilities (laterals, mainlines, pump stations, storage tanks).

8. Phasing

The consultant shall prepare a phasing plan for the facilities outlined in technical memorandum numbers 3, 4, and 5. The consultant shall phase the various projects taking into account the economics, constructability, ease of user acceptance and retrofit conversion process. The consultant shall submit their approach to CBMWD for review.

9. Project Management

In addition to normal project management functions, the consultant is responsible for the following:

Monthly Meetings

Attend monthly meetings, prepare an agenda for the meeting and prepare minutes of the meeting.

Monthly Status Report

Consultant will prepare monthly status reports on the progress of the project. The monthly status reports should include a contract summary showing expenditures for each budgeted task.

Additional Tasks

Allocate up to fifty hours of time to be used at Districts discretion.

Schedule

Consultant will prepare a schedule outlining all the tasks and deliverables. It is anticipated that the proposed scope of services, outlined in Section III, will require three to six months to complete. The schedule should be updated monthly if there are any deviations from the original schedule. All deviations are to be explained in the monthly status report along with the schedule.

Deliverables

- Technical Memorandum 1 – Data Assessment
- Technical Memorandum 2 – Database Development
- Technical Memorandum 3 – Potential Interconnections
- Technical Memorandum 4 – Conceptual Pipeline Routing
- Technical Memorandum 5 – Hydraulic Modeling
- Technical Memorandum 6 – Economic Analysis
- Technical Memorandum 7 – Phasing Plan
- Draft Master plan (10 copies)
- Final Master Plan (25 hard copies and one electronic copy)
- Model files, GIS files, Auto CAD files, Database files

EXPERIENCE AND QUALIFICATIONS

Consultants proposing on this job should have applicable experience and qualifications to perform the tasks outlined in the Scope-of-Services. Any experience working with CBMWD, cities, or water utilities within CBMWD's service area should be briefly discussed in the proposal.

PROPOSAL REQUIREMENTS

The proposal should be concise, well organized and demonstrate the qualifications and experience as it applies to the project outline in Section IV. The proposal shall include three (3) projects of similar scope and size the consultant has worked on including three (3) references. The proposal shall consist of a report not more than 20 pages in length exclusive of appendices. The report should include a proposed schedule to include all tasks, technical memorandum, submittals, and reports and indicate any concerns meeting the proposed schedule. It is anticipated that the proposed scope of services, outlined in Section III, will require nine (9) to twelve (12 months).

Five copies of the proposal are to be submitted.

The proposal shall be tabled, organized and numbered in the order presented below:

- Section 1 Identification of Respondent. Exhibit A – Business Statement
- Section 2 Executive Summary
- Section 3 Examples of representative engagements
- Part A Provide project summary (client, project title, date, description and financial size). Representative engagements should encompass studies for public utilities, and other directly relevant project experience.
 - Part B Provide at least three client references (name, title, organization, address and telephone) from projects listed in Part A above. Include at least one key team member.
- Section 4 Team organization and staffing
- Part A Provide an organization chart and description of key project team members proposed and their respective roles.
 - Part B Respondent shall name the project manager from these services who will coordinate all activities with CBMWD.
 - Part C CBMWD reserves the right to approve any changes to key personnel during the course of the project.
- Section 5 Proposed approach to accomplishing the project goals. Provide a discussion of your approach to accomplishing the project.
- Section 6 Work Plan:
- Part A Discuss the methodology to be used in accomplishing the tasks in the Scope of Work Section.
 - Part B Provide schedule by task showing key deliverables and the hours required performing each task.
 - Part C Improvements to work tasks
- Section 7 Budget: Not to exceed costs will be negotiated at final contract. The report should include a scope of services and a cost of services for the scope of services, listing the staff and staff classification.
- Proposed budget shall include a proposed not-to-exceed project cost, and rates and hours estimates.
- Respondents budget shall contain a summary of costs by major task or milestone with subtotals and totals.

All estimated reimbursable expenses shall be listed in the budget. Payment for mileage is restricted to the US Internal Revenue Service published mileage rate.

Reimbursable expenses shall not be allowed unless negotiated prior to a contract.

During contract negotiations, Consultant may be asked to provide a detail of the types of expenses included in the burden labor rates.

The proposal should be separated so that work for each district is distinct. Project will be awarded to the proposal best qualified to meet the needs of the three Districts combined including consideration of combined price.

CBMWD reserves the right to select only those services necessary for the completion of the work, and to deduct the cost of any unnecessary services from the contract.

PROPOSAL SUBMITTAL

Five (5) copies of the proposal are to be submitted to the CBMWD receptionist (2nd floor) by 10:00 a.m. on Monday, August 18, 2005 at the address below.

Central Basin Municipal Water District
17140 South Avalon Boulevard, Suite 210
Carson, CA 90746-1296
Attention: Joe Walters, Senior Recycled Water Specialist

SELECTION PROCESS

RFP's received by CBMWD will be reviewed by CBMWD staff and will be evaluated on experience, qualifications, references, schedule and cost of services. Proposers may be requested to present their proposals at CBMWD's Carson office on May xx, 2005.

INSURANCE/AGREEMENT

Attached is the agreement the successful firm(s) will be required to execute. Firm(s) shall provide general and professional liability insurance in accordance with standard CBMWD contracting requirements. Please review the agreement in its entirety with special attention paid to the indemnification and insurance provision. Any comments regarding the attached Agreement must be included in Section 11 of the RFP.

SPECIAL CONDITIONS

This RFP does not commit CBMWD to award a contract, to defray any costs incurred in the preparation of submittal pursuant to this request, or to procure or contract for work.